

Research Paper Requirements

Introduction

The research paper will allow you to develop a more complete understanding of the specific topical area that you have chosen. Although the way that you decide to convey the information is up to you, remember that these papers will be graded on content, style, grammar, writing ability, and thoroughness of research—so by following the instruction detailed below you will save yourself a lot of frustration. Please have someone proofread your paper before handing it in. This will save you time and points. This is an upper level college course and you will be expected to write well. If you have any questions regarding the research paper please see me ahead of time. Coming to me at the last minute with problems is not a good idea.

Research vs Historical Papers

Research papers address a specific research question, either through the analysis of data you compile (analytical paper) or through the comparison of the results of current research (comparative paper). Alternately, historical accounts typically "tell the story". While historical papers may appear easier to complete, they require much more reading—often from book and journals not available in our library. Regardless of the paper type you choose to do; ***start early, determine what materials you will need, and if our library doesn't have them use inter-library loan.*** Remember that inter-library loan may take some time!!! Below are the general formats for each type of paper:

Analytical and Comparative Format

Introduction

- Description of the topic
- Clearly stated research question

Relevant Current / Historic Research

- Review of past or current work

Analysis

For Analytical Papers:

- Description of the data
- Description of methodology
- Results of analysis

For Comparative Papers:

- General finding among researchers
- Comparison of the various results
- Problems and/or key issues

Discussion

- Observations concerning the results

Conclusions

References Cited

Historical Format

Introduction

- Description of the topic
- Clearly stated historical issue or question

Relevant Historic Works

- Review of past work
- Description of the historical context
- Historical outcome

Summary

- How topic relates to current issues

References Cited

Remember that each of these components should be used in the final paper to avoid duplicating work. So for example, use your outline as the basis for organizing and presenting your work. The final grade for your research paper is composed of all of these components. Failure to hand-in any of them will result in the loss of points.

IMPORTANT!!

Specific Research Paper Requirements

Please note the following specific requirements for the research paper. They are to appear in the order that they are listed:

1. A **Title Page** with:
 - a. The paper title
 - b. Your name, the course, and the date
 - c. The professor's name
 - d. A 1 paragraph abstract
2. A **Table of Contents** with:
 - a. Subheadings that appear in the text
 - b. Page number of these headings
3. A **Research Paper** with:
 - a. Begins with an **Introduction**
 - b. Has a well organized **Body** divided into **Sections** and **Subsections**
 - c. Ends with a **Conclusion** or **Summary**
4. A **Reference** or **Bibliography**
5. If needed, an **Appendix** with the data used to construct the map or other information not cited in the text.

Additional Requirements

These additional requirements are geared toward producing the final printed work:

- 1 inch margins only
- 12 point font
- Double spaced lines
- Sections and subsections divided by one blank line
- No blank lines between paragraphs in the same section
- Single spaced references/bibliography
- No one-sentence paragraphs
- Number all pages except the Title Page
- All embedded maps and graphics include a numbered caption (e.g. Figure 1: Cancer Map)

Please see the course syllabus for course-specific requirements, such as maps, etc...

Some Comments on Plagiarism

Plagiarism is representing someone else's work as your own. In order to avoid plagiarism you must give credit when you use:

- Another person's idea, opinion, or theory;
- Any facts, statistics, graphs, drawings--any pieces of information--that are not common knowledge;
- Quotations of another person's actual spoken or written words; or
- Paraphrase of another person's spoken or written words (taken from MLA Style Guide).

Simply rearranging someone else's words is not enough, if you are not the originator of the idea, you will need to give the author credit. Paraphrasing means that you substantially alter the wording without altering the meaning. However, not every sentence in a research paper needs to be cited. There is no formula for the process of paraphrasing or giving credit. But there is a quick test to see if you might be committing plagiarism: If the words or ideas are not yours, cite the source; if what you are relating is common knowledge, no citation is necessary.

An Example of Plagiarism

Original text from John Stuart Mill's *Utilitarianism*:

All persons are deemed to have a right to equality of treatment, except when some recognized social expediency requires the reverse. And hence all social inequalities which have ceased to be considered expedient, assume the character of not simple inexpediency, but of injustice, and appear so tyrannical, that people are apt to wonder how they could ever have been tolerated...

Paraphrasing that is a form of **plagiarism**:

All people are deemed to have a right to equal treatment, except when some accepted social expediency requires the opposite. And therefore all societal inequalities which have ceased to be considered expedient, take on character of not just inexpediency, but of injustice, and appear so tyrannical that people begin to speculate how they could ever have been tolerated...

Why is this plagiarism?

- Only a few words or phrases were changed, or the order of the original's sentences were changed.
- There is no citation.

One of the most common forms of plagiarism is cutting and pasting from an internet document. Even if you cite the material that was cut and pasted, it is still plagiarism. Putting quotes around the material will not help, since the objective of research papers is for YOU to do the work... not some other researcher.

Remember that computers are making it easier to get information and represent it as your own, but they also make it easier for people to check up on suspect material. If you have knowingly represented someone else's material as your own (e.g. plagiarized) and attempted to hide that fact, either by using obscure works or giving false citations, you will fail the course and may have to answer to the University administration.

If you have ANY questions regarding this subject, please do not hesitate to contact me.

Grading of the Research Paper

Below are the criteria that will be used to grade the research paper. Please read through this section carefully before and after completing your paper so that you do not needlessly lose points.

1. Paper Content

The content of the paper must be relevant to the course. Topics that are only tangentially related to the course subject should not be chosen. The grading of the content of a paper is inherently subjective and every effort is made to accommodate the interests of the student. However, if the content of the paper is obviously of poor quality, the final grade of the paper will be lower.

Grade loss for not meeting this requirement: Up to 100%

2. Missing Component

Any of the components of the Specific Research Paper Requirements that are missing will result in the loss of points **for each missing component**. The components are: (1) Title Page, (2) Abstract, (3) Table of Contents, (4) Introduction, (5) Summary/Conclusions, (6) References.

Grade loss for not meeting this requirement: 5% per component

3. Paper Length

Paper length refers to the total number of text pages, **excluding** all figures, graphics, maps, and references. The paper length listed in the syllabus refers to the **minimum** number of full pages that are required. Papers can exceed this minimum requirement by one or two pages. Please include page numbers only on body of the paper. Title pages, table of contents, references, etc... should not be numbered.

Grade loss for not meeting this requirement: Up to 5%

4. Number of Sources

The number of sources used in a paper reflects the researcher's level of effort and understanding of the topic, provided they have read the material. The number of sources required for research papers is a function of paper length: 8 page papers should have a minimum of 8 sources, 10 page papers should have a minimum of 10 sources, etc... All sources listed on the REFERENCES page **must be cited in the text**.

Grade loss for not meeting this requirement: Up to 5%

5. Map, Graphs, and Figures

Research papers should include at least one map showing the location of the study area, the subject of interest, or the research results. Certain topics that do not lend themselves to maps (e.g. electric automobiles) do not need maps. The maps must be high quality and completely legible. Maps downloaded from the Internet are acceptable **only** if they are **completely legible** once printed. These same requirements apply to figures, graphs, and photographs. Photocopied material must be clean, without black smudges or surrounding text. Hand drawn graphs or maps are not acceptable unless they are exceptionally well done. Maps, figures, and graphs must be placed immediately **following** their initial citation or reference in the text. Source information must accompany all maps, figure, etc... **All maps, figures, and graphs must be referred to in the text** using the following formats:

(See Figure 1) (See Map 3) (See Graph 2)

Grade loss for not meeting this requirement: 5%

6. Introduction and Conclusion/Summary

All papers must include a 1 to 2 paragraph Introduction and Conclusion or Summary. The Introduction must introduce the topic, address what points will be covered, state the time frame, and any other information that will help the reader understand the point of the research. It is here that the **research question or topic** should be clearly stated. The Summary should briefly re-state the main points of the paper and address any issues raised by the research.

Grade loss for not meeting this requirement: 2% for each.

7. Use of Personal Pronouns

Papers should be written in the abstract or third person. Do not use personal pronouns (you, I, me). Rather than writing, "The reason why **you** never..." try to restructure the sentence to remove the personal pronoun.

Grade loss for not meeting this requirement: 2%

8. Paper Organization

The paper must be organized into sections, and further into sub-sections where appropriate. Try to base these sections on your outline if possible. **Each section and sub-section must have a heading.** If your paper is disorganized, difficult to follow, rambling, or unduly boring points will be taken off.

Grade loss for not meeting this requirement: 2%

9. Internet Sources

While Internet sources can be a valuable addition to research, no more than 1/2 of sources cited can be Internet web pages. Do not use personal, business, or other Internet sites that have biased agendas. If using Internet pages as research sources follow the citation method listed in #13 below. On-line journals are treated the same as standard journals. Hint: stick with governmental or other well recognized organizations. Remember that the ease with which you found the Internet information also makes it easy for me to check these sites for accuracy and relevance.

Grade loss for not meeting this requirement: 2%

10. Appendices

If there is material which may be of interest to the reader, but is not directly addressed in the research, it should be included in an appendix. Under normal circumstances all material handed in with the paper should be included or addressed in the text. Please check with me if you think an appendix is needed. Including extraneous or off-topic material in the paper will result in points being lost.

Grade loss for not meeting this requirement: 2%

11. Grammar/Sentence Structure/Spelling

Good grammar and/or sentence structure is critical for conveying ideas and information correctly, without misinterpretation. Excessive bad grammar, misspellings, and/or poor sentence structure will result in lost points. Avoid run-on sentences, one sentence paragraphs, excessive use of jargon, and writing "as you speak." Carefully consider your punctuation and avoid excessive commas (See the Grammar and Writing section below).

Grade loss for not meeting this requirement: Up to 10%

12. Excessive Quotations

The use of direct quotations should be limited only to those that add substance to the paper. Excessive direct quotations show that the writer either cannot paraphrase or is lazy.

Grade loss for not meeting this requirement: 3%

13. Padding

Padding refers to using inappropriate techniques to increase the length of a research paper. Excessively wide margins (>1”), superfluous bullet or number lists, excessive spacing between headings or paragraphs are all examples of padding. A small amount of padding may be excused due to computer formatting or trying to make your paper “look” good. Excessive padding with lists or blank lines is unacceptable.

Grade loss for not meeting this requirement: 3%

14. Reference Citation Format

All sources listed in the REFERENCE section of the paper must be cited in the text of the paper or as the source information for maps, figures, etc... Please use the Chicago Style Manual format for citations. Examples of citations can be found in any article in the *Annals of the Association of American Geographers*. Copies of the *Annals* are located in the Allan conference room or in the Lehman Library periodicals section. Below is an example of the standard citation format:

14.1a Standard citation in the paper...

The effects of a succession of epidemics must be measured not only in mortality, but also in their secondary effects, which may be even more far-reaching (Zinsser, 1934, pg. 52).

14.1b Standard citation in the references...

Zinsser, Hans. 1934. *Rats, Lice, and History*. New York: Little, Brown and Company.

14.2a Article in an edited book in the paper...

... evidence for infection has been found in many other mammals (Burgdorfer, 1980, pg. 282).

14.2b Article in an edited book in the references...

Burgdorfer, A. S. (1980). Spotted fever-group diseases. In J. H. Steele (Ed.), *Section A: Bacterial, rickettsial, and mycotic disease* (pp. 279-302, Vol. II). C.R.C. handbook series in zoonosis, Boca Raton, FL: CRC Press.

14.3a Government document in the paper...

According to the U.S. Census Bureau (1990, pg. 47) Shippensburg, Pennsylvania has approximately 5200 permanent residents.

14.3b Government document in the references...

U.S. Census Bureau. (1990). *1990 Census of Population and Housing*. Washington, D.C.: U.S. Government Printing Office.

14.4a WWW citation in the paper...

The World Health Organization and the Joint United Nations Programme on HIV/AIDS (UNAIDS) estimate that, worldwide, as many as 42 million people have been infected with HIV since the pandemic's onset (CDC Internet Site, 1998).

14.4b WWW citation in the references...

CDC. (1998). Addressing the Global Epidemic: CDC's International Activities. *CDC Internet Site* (http://www.cdc.gov/nchstp/hiv_aids/pubs/facts/internat.htm). National Center for HIV, STD, and TB Prevention. Divisions of HIV/AIDS Prevention.

Grade loss for not meeting this requirement: Up to 5%

15. Missing Research Paper Deadlines

The actual deadline for handing in the research paper or any of its components will be announced in class. These dates *may* be adjusted based on unforeseen circumstances. However, the final date for handing in the paper will be the one announced in class unless otherwise noted. The paper will be due at the end of class on this date. Handing in the paper after class is considered late and the grade will be adjusted accordingly. If you have special circumstances which impact your ability to hand in the research paper on time, ***you must see me in advance.***

Grade loss for not meeting this requirement: 5% per day late

Other Observations Concerning Research Papers

1. Please do not put the papers in a binder, unless they are also stapled at the upper left hand corner. Binders look nice but are hard to deal with when grading.
2. Write your outline in such a way as to be able to use it as your Table of Contents. This saves time and your paper will be better organized.
3. Computers are wonderful tools... use them. Clear, legible, well done graphics are one of the signs of a well thought out paper. Simply stapling an Internet map to the back of your paper ***is absolutely unacceptable!*** This is one of the quickest methods of losing 5% that is known to humankind.
4. Including a map, figure, or graph within the text of your research paper is fine, as long as you realize that (a) it must be legible at the reduced size, (b) it is placed as close as possible to the text reference, and (c) ***it does not count toward the total paper length.*** Letter (c) is important because handing in a paper that is exactly *X*-number of pages ***including*** the graphics will cost you 5%.
5. Avoid unnecessary and superfluous graphics. They may look good, but unless they are referenced in the text they add nothing to your actual grade. Also note that too many graphics gives the appearance that you are 'padding' your paper.
6. The page length requirements refers to the total number of full pages. One line at the top of a page does not constitute a full page. For a page to be considered full there must be at least $\frac{3}{4}$ text.
7. One of the simplest ways of increasing your paper's length is to add bullet or numbered lists. This also happens to be the second easiest way to lose 5% (the first is #3 listed above). Lists of items should be written in sentence form. Unless there is some compelling reason for adding such as list, they will be considered superfluous and not counted toward the minimum number of pages requirement.

Grammar and Writing

Some of the information in this section was adapted from:

Hodges, John C. and Mary E. Whitten. 1986. *Harbrace College Handbook, 10th Edition*. San Diego: Harcourt Brace Jovanovich Publishers.

Below is information that will aid in using grammar correctly and improving one's writing style. Please read through this information when writing class papers and apply the techniques where appropriate.

Parenthetical Elements

Parenthetical elements are non-essential matter (such as an aside or interpolation) usually set off by commas but often by dashes or parentheses to mark pauses and intonation. A word, phrase, clause, or sentence may be parenthetical.

- Incorrect: The contamination discovered at Site #3 as well as that found at a few of the other sites was the reason for including this facility on the National Priority List.
- Correct: The contamination discovered at Site #3, as well as that found at a few of the other sites, was the reason for including this facility on the National Priority List.
- Correct: The contamination discovered at Site #3 (as well as that found at a few of the other sites) was the reason for including this facility on the National Priority List.

Lists

When a list contains three or more parallel or equally weighted items, each must be separated by a comma.

- Incorrect: Historically, the Globeville smelter produced high grade cadmium, zinc and lead.
- Correct: Historically, the Globeville smelter produced high grade cadmium, zinc, and lead.

If the list contains items of unequal weight (as in the case of 'fruit and vegetable', which can be treated as a single item) separate all items of equal weight by commas.

- Correct: The farm was noted for its cattle, fruit, vegetable, and poultry production.
- Better: The farm was noted for its cattle, fruit and vegetable, and poultry production.

Semicolons

Use semicolons between two main clauses not linked by a coordinating conjunction (e.g. and, but, for, or, nor, so, yet). Sentences will have a subject + predicate ; subject + predicate format.

- Incorrect: No person is born arrogant, arrogance must be taught.
- Correct: No person is born arrogant; arrogance must be taught.

Semicolons are also used to separate a series of items which themselves contain commas.

Incorrect: The academic sub-fields in our department include physical geography, geology, land, water, and natural resource management, human geography, and cartography.

Correct: The academic sub-fields in our department include physical geography; geology; land, water, and natural resource management; human geography; and cartography.

Use a semicolon before a conjunctive adverb that is placed between main clauses.

Incorrect: The average grade for the transportation geography class was relatively high, however, several students received low grades because of poor writing skills.

Note: The above sentence is an example of what is called a 'comma splice'.

Correct: The average grade for the transportation geography class was relatively high; however, several students received low grades because of poor writing skills.

Frequently used conjunctive adverbs:

also	however	otherwise
anyway	instead	still
besides	meanwhile	then
consequently	nevertheless	therefore
finally	next	thus

Commas

The use of commas is dictated by the structure of the sentence. Below are several examples of correct comma usage and the grammatical rules that apply to their placement.

1. A comma ordinarily precedes a coordinating conjunction that links main clauses.

Incorrect: Undergraduate courses from other departments are not usually accepted in the graduate program, graduate students are allowed to take two senior level courses within the department.

Note: The above sentence is an example of a comma splice.

Correct: Undergraduate courses from other departments are not usually accepted in the graduate program, but graduate students are allowed to take two senior level courses within the department.

Frequently used coordinating conjunctions:

	and	
	but	
	for	
main clause,	or	main clause.
	nor	
	so	
	yet	

2. A comma usually follows introductory phrases. Introductory phrases cannot stand alone as complete sentences.

Correct: Regardless of the means of construction or of use, accurate maps are a valuable first tool of analysis.

3. Avoid superfluous commas. Sentences with too many commas are difficult to read. Also avoid using commas to signify pauses that would be found if the sentence were spoken aloud. This signifies "writing as one speaks", a bad habit to break once started.

Incorrect: The facts were selected, and organized with care.

Correct: The facts were selected and organized with care.

Incorrect: The Environmental Health class was interesting, but, the tests were hard.

Correct: The Environmental Health class was interesting, but the tests were hard.

Capitalization

Capitalize the following:

- | | |
|-------------------------------|---|
| • proper names | Paul Marr, Benjamin Franklin |
| • geographical locations | Middle East, Germany, Orrstown, Snake River |
| • peoples and languages | Japanese, Aztec, Polish, Latin |
| • organizations | Red Cross, Federal Express, Shippensburg University |
| • days of the week | Monday, Arbor Day, Christmas |
| • historical documents/events | Romantic Movement, Bill of Rights, the Brady Bill |
| • religions | Islam, Mormons, Allah, Talmud |
| • personifications | Old Man River, Father Time |
| • derivatives | Americanize, Stalinism, Germanic |
| • Abbr. or acronyms | Abbr., D.C., AT&T, NATO, CDC |
| • titles | Governor, President |
| • events | Great Depression, World War I |

Avoid unnecessary or random capitalization of terms or words. For instance, diseases are only capitalized when their names are derived from words that are normally capitalized.

Incorrect: The rate of Asthma occurrences appears to be increasing.

The 1918 Spanish Flu was the worst pandemic in recorded history.

Correct: The rate of asthma occurrences appears to be increasing.

The 1918 Spanish flu was the worst pandemic in recorded history.

Examples of diseases to capitalize:

Capitalize

Reyes syndrome
Parkinson's disease
Ebola Zaire

No Capitalization

asthma
yellow fever
malaria

Effect v Affect

Please understand the difference between affect and effect. The verb affect means “to influence”. The noun effect means “result of a cause.”

Drinking affects the liver.
Many drugs have side effects.

His liver was affected by his drinking.
The effect of the treatment was amazing.

When used as a verb, effect means “to produce as an effect.”

Example: The medicine effected a complete cure.

Among v Between

Use among with objects denoting three or more, and use between with those denoting only two.

Example: We walked among the restaurants, trying to choose between steak or seafood.

Emigrate v Immigrate

The prefix e- means “out of”; the prefix im- (a variant of in-) means “into.” Think of export and import when using these words.

Example: Few people who emigrate from Tennessee immigrate to Pennsylvania.

Irregardless v Regardless

There is no such word as irregardless. It is a nonstandard form of regardless. Always use the latter.

Like v As though

Many people use like as a preposition similar to such as. When writing, please try to avoid this common error. Use as, as if, or as though in place of like in sentences where similarity is implied.

Incorrect: It appears like people prefer to drive their own automobiles to work rather than taking public transportation.

Correct: It appears as though people prefer to drive their own automobiles to work rather than taking public transportation.

It's v Its

Please be aware that it's and its are two very different words. *It's* is a contraction for “*it is*” (see *Contractions* below). The word *its* is the possessive form of the pronoun *it*.

Incorrect: Due to the difficulty in controlling the mosquitoes that harbor West Nile virus it's spread has gone largely unchecked.

Correct: Due to the difficulty in controlling the mosquitoes that harbor West Nile virus its spread has gone largely unchecked.

Contractions

Contractions are common in informal speaking and writing, but are inappropriate in research papers.

Incorrect: The term ‘small pox’ doesn’t provoke fear as it did in the 16th century.

Correct: The term ‘small pox’ does not provoke fear as it did in the 16th century.

Abbreviations and Acronyms

Abbreviations should not be used in a research paper. Acronyms should only be used when they have gained widespread acceptance. Acronyms should be spelled out the first time and the correct acronym should appear directly after it in parentheses.

Incorrect: ... the highways in PA are considered the least maintained in the country.

Correct: ... the highways in Pennsylvania are considered the least maintained in the country.

Incorrect: ... a team from the CDC was sent into the region...

Correct: ... a team from the Centers for Disease Control (CDC) was sent into the region...

Incomplete or Fragmented Sentences

Fragments are non-sentences that begin with a capital letter and end with a period. Sentence fragments are a very common error, so please try to avoid them.

Incorrect: The situation was grave. *Because there was little the air traffic controllers could do for the aircraft.*

Correct: The situation was grave because there was little the air traffic controllers could do for the aircraft.

Writing Styles

Below are several examples of common stylistic problems that professors encounter when grading research papers or other written work. Please read through these carefully and understand where the problems occur and how to avoid or correct these problems. Some of these examples (with a few minor alterations) have been extracted from papers submitted to this department.

... there is been a increase in the mortality rate of brain cancer.

↑ ↑
SV error use "an"

... it appears that children, short women and cats are most likely ...

↑
lists of 3+ need a comma

... researchers have noticed a high amount of cancer in Carlisle ...

↑
poor word choice

Research has been done to show abnormalities are encountered.

↑
awkward sentence structure

Like with Ebola, mostly they die from internal bleeding.

↑ ↑
do not write as you speak!

... obviously pollutions play a role in bronchitis incidences.

↑ ↑
incorrect plural form same here!

... seems to be operating however, other factors may be involved.

↑
misplaced comma

... one of the first things that you notice is the number of cases ...

↑
do not use personal pronouns

Control amplification of reverse-transcribed fragments by polymerase chain reaction (RT-PCR) for β -actin was positive; however, replicative reactions with different blocks gave inconclusive results.

do you really understand what this means?

... many people around the world are effected by this debilitating ...

↑

affect vs. effect

There doesn't seem to be any association between the distribution of Lassa fever and fruit bats.

↑

Do not use contractions!

The most common symptoms are fever and rash, usually of the lower torso, and more often in males than in females, which have a greater chance of developing the rash symptoms on the lower abdomen since the bacteria is most often found in the digestive system, which often occurs in the first 2 or 3 days after the first symptoms appear of this terrible disease.

run-on sentence!

Grammar Symbology used by Dr. Marr

Below is a list of the symbology used to correct research papers.

SV	Subject verb error
WC	Poor word choice
PPN	Inappropriate use of personal pronoun
U	Incorrect word usage
Col	Colloquialism
TS	Inappropriate verb tense shift
AWK	Awkward sentence structure
¶	New paragraph
SP	Spelling error
Red	Redundancy
Run	Run-on sentence
Frag	Sentence fragment or incomplete sentence
Cap	Unnecessary capitalization
No	This statement is incorrect or incomplete
No!	This statement is very incorrect or incomplete
NO!	Yikes! This statement is so incorrect or incomplete that it gave me a brain hemorrhage...
Good	This statement or concept is interesting and informative
Good!	This statement or concept is very interesting and informative
GOOD!	Egad! This statement or concept is so interesting and informative that it gave me a brain hemorrhage...
_	Blank space not necessary
/	Punctuation mark not necessary
?	I do not understand this!
!	This surprises me greatly!
&\$%!?@	Re-read this handout!!!