Overview of the Research Paper
A research paper should be a formal, well-documented composition. Its introduction should begin with a compelling hook leading to a strong thesis statement; its body paragraphs should be headed by clear topic sentences which divide the main idea into logical sections; its conclusion should wrap up the whole subject in a satisfying way. Research papers fall into one of three categories:

1. **Expository**—gather, summarize, and explain information
2. **Analytical**—analyze components, arriving at meaning or causes
3. **Argumentative**—argue FOR or AGAINST the topic in order to persuade

Skills Needed For/Steps to Writing Research Papers
Writing an effective research paper involves locating, evaluating, interpreting, and organizing information from a wide variety of sources. During the writing process, you will learn to:

- budget time
- choose and narrow a topic
- become comfortable using the library and the Internet for research
- judge the credibility and value of sources and content
- logically organize ideas to inform, analyze, or persuade
- incorporate source material smoothly
- document sources appropriately, avoiding plagiarism

Budgeting Time
The best time to start work on a research project is the minute the instructor assigns it. **Don't procrastinate!** The research process is time-consuming and messy. If you delay, you will be trying to find, read, and understand complex articles and books at the last minute. You may also discover, deep into the research process, that your topic is too broad, too narrow, or not appropriate to the assignment, requiring *yet more* research. And that’s all before you even begin to write.

In order to make the best use of time, **develop a tentative schedule with deadlines** for completing parts of the process: research & note taking, organization, writing, documentation, revision. Build as much leeway into each step as you can finagle, and dedicate a regular time in your daily routine to this project. Enter the dates and times from the schedule on a calendar, or list them on a white board. Revise and update the schedule as work progresses.

Choosing & Narrowing a Topic
**One good place to dig for a topic is an encyclopedia such as Wikipedia or Encyclopedia Britannica.** Although most instructors forbid the use of encyclopedias as references, a good encyclopedia article can provide an overview of a topic, as well as a list of relevant sources.

**Since you will live with this topic for several weeks, it is important to choose something that appeals to you.** For instance, a student who is a Civil War buff might look up “American Civil War” in Wikipedia, leading to an article containing seven lengthy sections about the conflict and a “References” section listing 75 sources, along with “Notes,”
“Citations,” “Further Reading,” and “External Links.” This promises to be a richly-sourced topic—too rich, actually! You could write a book about the American Civil War! Many people have!

When faced with an interesting but too-broad topic, choose just one aspect to research and write about. The Wikipedia article on the Civil War contains subheadings, such as “Sectionalism and the cotton trade,” “Border states,” and “Naval war.” Each of these subsections is a possible topic. For instance, the Wikipedia article on “Sectionalism,” though brief, lists ten sources, many of which are available in our library or online.

Gathering Information

Internet Research: The Internet is chock full of valuable material, much of which is valid for research, but anyone can put anything on the Internet! It is not enough to simply Google a topic, randomly select a source from the list, and write down whatever pops up on the screen as factual. Carefully scrutinize and evaluate every website. The CWC handouts “Using the Internet to Write a Research Paper” and “Evaluating Websites” cover how to do this in depth, but some of the basic questions to ask yourself about a website are:

- Who is making what claims on this website?
- Who is paying for them to claim that? Does that put a spin on what is being said?
- How old is the material?
- Is the material in line with other reputable sources, or does it diverge drastically?

Cite your sources as you go; it will ultimately save you time and insure you do not accidentally plagiarize. As you gather material online, write down the citation information for each source, including author, title of article (or part of website), title of original print source and page numbers (if applicable), title of database or website, sponsor, date of publication, date of access. See CWC handouts on MLA, APA, or Chicago Manual of Style for more precise information.

Some students like to write citation information on 3x5 inch cards along with brief notes (annotations) about what that source contains, then organize these cards alphabetically. Others record the information in a notebook and arrange it later on the computer. With the advent of mobile devices, many students are creating their list of sources electronically; if you choose this route, be sure to back it up in at least one other place, so you don’t accidentally lose all your work.

For the content of the paper, it is beneficial to print off the important sections of websites so you can highlight significant points and make notes in the margins of the print-outs as you read. For more advice on active reading, consult the Meramec Academic Center in IR218.

Library Research: A lot of library research also begins on the computer. Whereas the internet can be a jungle where exotic data lies hidden within thicket of misinformation, library databases have already been explored for you. Databases are curated and organized collections of articles all gathered in one easily-searchable place. Most libraries subscribe to several expensive databases so users don’t have to! Ask any librarian to assist you in accessing and navigating this treasure trove.

Libraries also contain vast deposits of valuable print material such as books and professional journals. Often, you will come across these sources listed in bibliographies or
reference sections of other sources. **These scholarly print sources, as well as material from databases, are still the bedrock of scholarly investigation and should play a significant role in your research.** Your friendly librarians will be glad to help guide you through their online catalog and the stacks to find what you need.

As with online sources, you should **write down citation information for print sources** as you go. Print off articles from databases just as you did for websites, and either make copies of the print sources or take careful notes of what they say.

During the whole research process, it will help immeasurably to **keep an informal journal** where you chat with yourself about the information you are gathering. You will discover connections between ideas as you write about them, and will also discover what you don’t yet know when you run up against questions you can’t answer. This will help guide further research.

**Logically Organizing Ideas**

After gathering a significant amount of information, organize it before you begin to write. By this point in your college career, you will probably have developed a method that works for you, whether it’s a formal outline or laying out information in boxes or bubbles to help visualize it more easily.

Your instructor may ask for something specific in regard to structure, but otherwise, the average research paper is organized much the same as the academic essays you have written for composition classes: introduction with thesis statement, body paragraphs logically dividing up the topic, and a conclusion.

Which type of research paper you are writing will determine what each of these sections contains:

<table>
<thead>
<tr>
<th><strong>Expository</strong></th>
<th><strong>Analytical</strong></th>
<th><strong>Argumentative</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td><strong>Introduction</strong></td>
<td><strong>Introduction</strong></td>
</tr>
<tr>
<td>• hook</td>
<td>• hook</td>
<td>• hook often gives background of issue</td>
</tr>
<tr>
<td>• thesis statement answers “What is (subject)?”</td>
<td>• thesis statement answers “Why?” or “How?”</td>
<td>• thesis statement contains clear judgment</td>
</tr>
<tr>
<td><strong>Body Paragraphs</strong> divide the subject into constituent parts to describe/explain</td>
<td><strong>Body Paragraphs</strong> use compare/contrast, cause/effect or specific criteria to evaluate topic</td>
<td><strong>Body Paragraphs</strong> lay out reasoning for judgment and address opposing points of view</td>
</tr>
<tr>
<td>Each paragraph will include:</td>
<td>Each paragraph will include:</td>
<td>Each paragraph will include:</td>
</tr>
<tr>
<td>• topic sentence</td>
<td>• topic sentence</td>
<td>• topic sentence</td>
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<tr>
<td>• explanation/discussion</td>
<td>• explanation/discussion</td>
<td>• explanation/discussion</td>
</tr>
<tr>
<td>• specific examples, data, details</td>
<td>• specific examples, data, details</td>
<td>• specific examples, data, details</td>
</tr>
<tr>
<td><strong>Conclusion</strong> often summarizes topic, reflects on significance of subject</td>
<td><strong>Conclusion</strong> often reflects on the significance of thesis, may offer judgment</td>
<td><strong>Conclusion</strong> often looks to the future, gives a call to action</td>
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</table>

Body paragraphs will include **Counterargument & Refutation**
Incorporating Source Material
Writers use source material to support what they have to say. A rule of thumb is that body paragraphs should not start with a quote/paraphrase/summary, but with a topic sentence expressing the writer’s own thought. However, within the paragraph, correctly including material from sources to support claims is critical to the research paper. There are three basic approaches:
1. Direct quotations are someone else’s words verbatim; use quotation marks and credit the author.
2. Paraphrasing is rephrasing someone else’s idea in your own words; credit the author but do not use quotation marks.
3. Summarizing is heavily condensing someone else’s idea in your own words; credit the author but do not use quotation marks.

See the CWC’s handouts “Plagiarism,” “The Quote Sandwich: Effectively Integrating Quotes as Evidence,” and “Signal Phrases to Introduce Source Material: Avoiding Dropped Quotes” for more detailed information on incorporating in your research paper.

Documenting Sources
Different disciplines use different documentation formats; for instance, the sciences use APA, while the humanities use MLA, and history often uses The Chicago Manual of Style, but there are many other styles specific to various disciplines. Be sure you know what citation format your instructor is expecting. Most instructors will make their preferences known on their assignment sheet, but if not, ask before you begin research, then stop by the CWC to pick up the relevant handout so you will know what information to collect. If you use citation-generating software, be sure to check the results. The CWC will also be happy to advise you on documentation.

A Selection of Pertinent CWC Handouts
“Using the Internet to Write a Research Paper”
“Evaluating Websites”
“Summarizing”
“MLA Guidelines for Documentation—7th Edition”
“Outlines”
“Plagiarism”
“The Quote Sandwich: Effectively Integrating Quotes as Evidence”
“Signal Phrases to Introduce Source Material: Avoiding Dropped Quotes”
“Hooking Your Reader”
“Writing Effective Conclusions”