

Physics 420: Classical Mechanics, Writing Intensive (CRN 91197)

SUNY Cortland policy on writing intensive course requirements

Writing Intensive (WI) courses have the following characteristics:

1. They require students to write the equivalent of 15 typed pages.
2. They require at least 2 pieces of writing; or in some courses, one project which will be submitted in multiple drafts.
3. Any writing for a final examination is not included in the 15 pages of writing required.
4. Students must have opportunities to revise their written work.

The assignments

Your 15 pages of required writing will be split into three assignments: a cover letter, a resume, and a scientific review piece written in the form of a journal manuscript.

Grading

The writing assignments will collectively be worth 15% of your course grade. The following table defines how these points will be awarded based on the cumulative grade from these assignments.

0 – 5 points	failure of course
6 points	threshold for passing the class, 6 pts = 0% for the WI component
16 points	100% (full credit for the WI component)

The first two assignments will be graded on a 3-level assessment. I expect that you should receive 2's on the first two assignments with a very reasonable effort.

Unacceptable	0 points
Acceptable	1 point
Satisfactory	2 points

Rewrites on the first 2 assignments: I do not expect that you know how to prepare a quality resume or cover letter. The point of these assignments is to provide you with useful products from your writing and to get us started on the process of revision. Therefore, I expect that you will incorporate my comments from your first drafts of these assignments and produce an improved, job-market-ready product. You will only be graded on the final version of these assignments.

The third assignment is the most important assignment that focuses on technical writing and is where you “earn your grade” for this component of the course. This assignment is worth a total of 12 points. This assignment will be done using the “contract grading” system where the focus is the revision process. You will get full credit for meeting the submission deadlines of the first assignments with an honest effort at the work. With the feedback provided to you from those first drafts, you will be required to revise your work and will earn further credit toward this assignment by meeting the revisions.

My expectations

My experience has been that every document (including all of my own writings) needs to be reworked, usually multiple times. Therefore, I will provide feedback to you to help you improve your technical writing. I expect that you take my feedback seriously and incorporate it into the final product. The extent of the revisions required will depend on how strong of a writer you are and how much effort you put into the initial work.

Additional Resources

SUNY Cortland opened its Writing Center last spring. This center is located in Room 216 in Brockway Hall. You can make an appointment with them to review your writing and develop a plan for revisions. You may want to visit here before and after your first draft.

Assignment 1: Cover letter (1 page)

DUE: September 6

This is a one page document in the form of a professional cover letter. This assignment is intended to provide you with a product that is inherently practical and that you could adapt for an application to a job or graduate school. The main purpose of the cover letter is to sell yourself.

Do:

- Describe your interest in the institution or business. Be specific.
- Tell the person reading your letter why you are qualified. Be honest.
- Make a case for how you will add value to their institution or business. Be compelling.

Don't:

- Do not sell yourself as an expert or the ideal candidate. Most attempts to speak with outrageous confidence come off as outrageously unbelievable.
- Do not exaggerate your capabilities. Anything you write here is likely to come up in an interview where you will be asked to provide details to support your claims.

Assignment 2: Professional résumé (2 pages)

DUE: September 20

The resume is a summary of yourself. While there is a somewhat typical format for a resume, it should also be individualized. You should make it a creative endeavor. DO NOT simply plug your name and other info into a template you downloaded from the internet. Your pride in your work shows and starts with your cover letter and resume.

This document is intended to complement the cover letter from the first assignment. In academic circles the standard is the curriculum vitae (CV) which is a long and comprehensive resume that includes every presentation and paper. At this point in your career, a resume is more appropriate. The actual format of a resume depends somewhat on your intentions, and will vary depending on whether you are aiming for the corporate world, a teaching position, or for graduate school. Nonetheless, the resume should have these common sections:

- Your name and contact info should be on the top, distinguished and easy to read. Don't make it ambiguous who you are.
- Resumes for industry often start with a statement of professional goals. This is somewhat field-specific and is not required, but is a nice one or two sentence reminder of how you will add value to the organization to which you are applying.

- Education (institutions, degree, date earned or expected, any associated relevant information such as minors, area of focus, or thesis)
- Work or research experience
- Additional skills and interests

Writing Assignment #3: The technical report

This assignment is a document in the form of a technical report. Depending on where your career goes from here you may encounter something like this as an internal report in an engineering firm or something like a scientific paper in a research setting. Either way, the core elements of these kinds of documents are the effectively the same.

Your goal for this work is to pick a particular physics subject (technical, not historical) and argue a point. To do this you will need to read at least three sources to develop a sense of the questions that are being asked in the studies.

This assignment will build toward conclusion with multiple sub-assignments. We will take a staged approach toward convergence to good writing starting from a rough draft and progressing through two rounds of revisions. Your work will be graded using the “contract grading” scheme where you will get set points for completing the assignments on time.

Sub-assignment #1 (10%)

DUE: September 27

Read this assignment definition and [review the provided manuscript template file](#). Your first sub-assignment is to develop a grading rubric that identifies what you believe to be the main elements of this project and the specific style components essential to writing a technical report. In essence, show me that you understand the goals of this work and what you need to do to be successful.

Sub-assignment #2 (10%)

DUE: October 4

Identify your topical area, three peer-reviewed articles (or books or other legitimate source), and the central question you will be addressing in your technical report. I may provide feedback to you and ask you to resubmit if I believe that your sources or question need to be changed.

Sub-assignment #3 (20%)

DUE: October 25

Rough draft: This first pass at the writing is meant to be rough and meant to get you moving so that you have something to edit. No work that is decently written ever gets to final draft in one go. This whole project is about the revision process, and therefore you will start with something to revise. The point here is to make sure that your paper has the essential elements in it. You will not be graded on the clarity or exquisiteness of your writing, but on the inclusion of the structural components. My comments will focus on the big picture, but understand that this is not an endorsement of the writing *per se* and you are expected to revise and improve the entire report.

Sub-assignment #4 (20%)

DUE: November 15

1st draft: You will be graded on the improvement of your paper compared to the rough draft (I need you to submit both for comparison). Comments on this draft will focus more on grammatical issues and finer details and are intended to lead you to a finished product.

Sub-assignment #5 (20%)**DUE: December 6**

2nd (and final) draft: You will be graded here on the extent to which you have revised your manuscript based on feedback on your first draft.

Supporting work:

Completing the prior sub-assignments on time and according to the feedback provided means that you can earn a maximum of 80% of the total project value. The remaining 20% can be earned by writing two brief assignments that are external to the core writing project. These are meant to be self-reflective pieces where you consider your writing through the lens of the revision process.

Supporting work #1 (10%):

A one-page reflective essay of the process of revision based on your discussions at the Writing Center. You must include the date and time of your appointment and the name of the person with whom you met.

Supporting work #2 (10%):

Writing is a painstaking process, for everybody. None of my writing was ever good on the first go. This supporting work is a document that shows me how you took feedback from your first draft and revised your work through multiple (at least three) iterations of a statement. The point here is that you likely need to revise a sentence or collection of sentences multiple times in order to achieve something that can be considered good writing. In addition to a record of the multiple revisions, you must also provide commentary on your decisions for each of the revisions. Please see the accompanying document that provides an example of a real iterative writing process that I engaged in, starting with an outline of ideas and concluding with a (perhaps) acceptable abstract.

Penalty for late submissions:

Each sub-assignment will be reduced in value by 5% (of the total) for each 3 days that the assignment is late, rounded up. For example, if you hand in sub-assignment #3 two days late, this would decrease its value to 15%.

Formatting:

You should use the provided template file, which has the following formatting conditions included:

1. 5 pages of text, not including the figures and references (on separate pages at the end)
2. Includes abstract, introduction, body sections, conclusions, figures, and references
3. 1" margins all around
4. Standard font selections: Times New Roman 12 point
5. 1.5 line spacing
6. Figures must include a caption with a numerical reference
7. Equations must be referenced as indicated in the template file.
8. A minimum of three citable references.
9. You must properly cite statements in the paper that are not your own. Note that this includes things that are not exact quotes. You do this anytime you take an idea that is not common or your own.