

PHYS/GLBL 280

Writing Lab 02/02/2026

Discussion of RE1

RE2v1 Writing Prompt

Due Date: Wednesday, February 4, 10pm

Scenario: (1) You are an analyst for the Congressional Research Service in the early 1940s. Representatives from President Roosevelt have asked you to write a brief special report for a select group of senators and representatives that will convince them that the United States should fund a new nuclear weapons technology that is so powerful a single strike has the potential to stop the war. Funding for the Manhattan Project (active: 1942-1946) must be kept almost entirely hidden from members of Congress, but the support of these select individuals will help push through certain funding measures and allow the project to proceed without undue pressure or curiosity from the rest of the legislative branch.

RE2v1 Writing Prompt

(2) Your report should tell the story of how investing in the science will be worth the cost (historically, a case initiated by Albert Einstein and Leo Szilard). Rhetorically, your report should open with a very brief statement of the challenging military circumstances the United States and its allies face in the European and Pacific theaters of WWII and why it is so important to deviate significant funds from the ongoing war effort to fund nuclear bomb development. To convince readers, you will need to explain the underlying science so that they can understand what scientists plan to do, why this development is so challenging, and how its potential for winning the war outstrips conventional bombs.

RE2v1 Writing Prompt

(3) In making the case for funding the Manhattan Project, be sure to include the following technical content (not necessarily in this order).

- The definition of (a) a fissionable nuclide, (b) a fissile nuclide and (c) a fertile nuclide. In your explanation, list (d) an example of a fissile nuclide, (e) an example of a fissionable nuclide that is not fissile, and (f) an example of a fertile nuclide.
- The definition of (a) a nuclear-explosive nuclide and (b) a nuclear-explosive material. Explain (c) whether or not all fissile nuclides are nuclear-explosive nuclides. Explain (d) why some nuclides that are not fissile are nevertheless nuclear-explosive. In your explanation, (e) list an example of an important nuclear-explosive nuclide that is not fissile.

RE2v1 Writing Prompt

(3) In making the case for funding the Manhattan Project, be sure to include the following technical content (not necessarily in this order).

- Explain in one or two paragraphs the basic, general requirements for achieving a nuclear explosion using nuclear explosive material. n.b. Do not go into any of the details of particular weapon designs.
- Explain in (a) one paragraph why the energy released in a nuclear explosion is much greater than the energy released in the explosion of a conventional bomb. In (b) a separate paragraph illustrate the magnitude of energy release of a nuclear explosion when deployed strategically.

RE2v1 Writing Prompt

The report should be based on the following sources:

1. "Physics and Technology of Nuclear-Explosive Materials".
2. PHYS 280 Spring 2026 "Nuclear Weapons" lecture slides.

Procedure

1. Prepare your own standalone answers (no AI use) to the third point of the scenario section.
2. Instruct your AI-tool to write the paragraphs requested in the last two bullet points of the scenario section.
3. Based on the products of (1) and (2) draft your own response to the RE2 scenario (no AI use).
4. Instruct your AI-tool to prepare a draft. A good prompt may include as inputs the products of (1) and (2), one or both CRS examples for style reference, and relevant documents from the references provided.
5. Create the final version based on both (3) and (4)
6. **IMPORTANT:** Record all AI prompts and outputs in your writer's memo

Guidelines

- Your answer to the third point in the Scenario section above should constitute approximately one-third of your report.
- You will be graded on the content and clarity of your report as well as your ability to conform to the writing style of a Congressional Research Service (CRS) report—see the rubric. Here are two examples of CRS reports: [A primer on Nuclear Cooperation](#) and a report on [Nonstrategic Nuclear Weapons](#). These reports are much longer than yours will be and are only meant to serve as examples of style.

Guidelines

- In writing your report, assume that your reader is a college-educated member of the U.S. Congress who is broadly familiar with the material that has been presented in the lecture-discussions and the material in the readings that have already been assigned, but be sure to define all the terms you are asked to define in the prompt above. You do not need to place these definitions in quotation marks, but you do need to provide citations for them.
- Integrate the technical content into your discussion.

Format

- Your report should be 1 page in length, single-spaced, when printed in the format specified in the Phys 280 Style and Format Guide, including the title, headers, and footers.
- The title should briefly describe the content of the report. It should be centered, bolded, and 16-pt font.
- After the title, include a brief (2-4 sentence) summary of the content of your report. Include a left-aligned “Summary” heading to clearly indicate this section. The heading should be left-aligned, bolded, and 14-pt font.
- Four additional sections should follow the summary section. Each section corresponds to one of the points described in the Scenario above. Each section requires a section heading that is left-aligned, bolded, and 14-pt font. Headings should be brief.
- Key terms should be in **bold** the first time you use them.

Citation of Sources

- Use footnotes for citations. Footnotes should be in Times New Roman, 10pt font.
- You do not need to give citations when the information you use is common knowledge. In deciding what is common knowledge, consider what could be known by a typical University of Illinois student (not enrolled in Phys 280). If in doubt, include a citation.
- The sources you are to use are clearly specified in the first bullet point.
- You should refer to the Phys 280 course slides as "26p280 Nuclear Weapons, slide #" (e.g., "26p280 Nuclear Weapons, slide 15") and the "Physics and Technology of Nuclear-Explosive Materials" article as "NEM, page #" (e.g., "NEM, page 221"). The page numbers for the article are 221-226.
- Do not include a bibliography or a list of references.

AI Disclosure Statement

Discloses the use of AI in technical writing. The statement specifies the tool used and briefly describes how the tool was used. It includes a certification that the author takes responsibility for the verification of all facts and content.

(This is different from the writing memo. Your log of AI prompts and responses is included in the memo, not this disclosure statement)

Writing Memo

- The writer's memo for RE2v1 will facilitate the peer review component of this assignment.
- Compose 3-5 questions to which your peer review partner will respond.
 - These questions can be related to content, organization, style, or grammar.
 - For example, you could ask for clarification on some aspect of the points described in the Scenario section above.
 - Or you could also ask if your paper has adequately adhered to the CRS report genre.

Writing Memo Cont.

- Both your response and the AI-tool's to the third point of the scenario section
- Both your draft and the AI draft
- A complete log of all AI prompts and responses

Writing Memo Cont.

- Brief answers to the following questions:
 - Did the AI-tool make any factual/technical mistakes in its explanations?
 - A brief analysis of the differences between your own draft revision and the AI draft revision. You might comment on the overall structure, factual correctness, style, use of vocabulary (e.g. use of professional arms control terms).
 - Which aspects of your own draft do you prefer over the AI draft?
- Please include a sentence stating how much time you used for this assignment.

Peer Review of RE2v1

Due Date: Monday, February 9, 10am

This assignment has a peer review component. You will be asked to review a peer's RE2v1 by i) addressing the questions contained in their writer's memo (describe above) and ii) making at least two substantive comments on their RE2v1, preferably using the review feature of Microsoft Word. These comments can address an issue with content, style, or grammar; they could also praise an exceptional aspect of the paper. Your partner will be assigned via email after you submit RE2v1, and you will discuss your review with your partner in the Feb. 9 writing lab. The peer review is due on Feb. 9 at 10am via electronic submission.

Peer Review of RE2v1

Due Date: Monday, February 9, 10am

After the RE2v1 due date, you will receive an email with your partner and instructions on finding their RE2v1 submission. Also, you will be asked to email your peer review to your partner at the end of your Feb. 9 writing lab.

As stated in the RE2v1 rubric, peer review is 10% of your RE2v1 grade (the points will be added after the Feb. 16 writing labs).

Procedure

1. Write your own peer review comments (no AI use).
2. Upload your peer's paper and your peer review comments to your AI-tool and instruct the AI-tool to analyze the paper and make additional comments.
3. Create a final set of peer review comments based both on your original comments and the AI-tool's response.
4. **IMPORTANT:** Record all AI prompts and outputs in your writer's memo

Writing Memo

Please include:

- Both your original peer review comments and your AI-tool's comments
- A complete log of all AI prompts and responses
- A brief answer to the following question:
 - Were the AI-tool's comments useful or not and why?



| Features: | Description: | Range | Comments for 2-3 primary features (by % weight) |
|---|--|---|---|
| Coverage of issues & information | <p>In making the case for funding the Manhattan Project, be sure to include the following technical content (not necessarily in this order):</p> <ul style="list-style-type: none"> • The definition of (a) a fissionable nuclide, (b) a fissile nuclide and (c) a fertile nuclide. In your explanation, list (d) an example of a fissile nuclide, (e) an example of a fissionable nuclide that is not fissile, and (f) an example of a fertile nuclide. • The definition of (a) a nuclear-explosive nuclide and (b) a nuclear explosive material. Explain (c) <u>whether or not</u> all fissile nuclides are nuclear-explosive nuclides. Explain (d) <u>why</u> some nuclides that are not fissile are nevertheless <u>nuclear-explosive</u>. In your explanation, (e) list an example of an important nuclear-explosive nuclide that is not fissile. • Explain in one or two paragraphs the basic, general requirements for achieving a nuclear explosion using nuclear explosive material. n.b. Do not go into any of the details of <u>particular weapon designs</u>. • Explain in (a) one paragraph <u>why</u> the energy released in a nuclear explosion is much greater than the energy released in the explosion of a conventional bomb. In (b) a separate paragraph <u>illustrate</u> the magnitude of energy release of a nuclear explosion when deployed strategically. | <p>15%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |
| Accurate use of concepts | <p>Accurate, clear definitions of:</p> <ul style="list-style-type: none"> • Fissile, fissionable and fertile • NEM, NEN <p>Accurate explanation of:</p> <ul style="list-style-type: none"> • Nuclear explosion using NEM • Energy release <u>greater</u> than conventional bomb | <p>5%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |
| Explanation & argument | <ul style="list-style-type: none"> • Writer's approach is persuasive • Technical content is integrated into the persuasive case • Explanations use careful logic and evidence in reasoning about concepts and their applications | <p>5%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |

| | | | |
|--|---|-----|---|
| Professional & adaptive style | <ul style="list-style-type: none"> ● Geared toward college-educated <u>member</u> of Congress ● Congruent with Congressional Research Service report style: text is clear, concise, organized; uses a tone appropriate to writing situation (CRS report) ● Comprehensive and thoughtful use of sources (need both “Physics and Technology of NEM” and course slides). <ul style="list-style-type: none"> ○ Source info cited according to assignment sheet | 20% | |
| Conformity to conventions | <ul style="list-style-type: none"> ● 1 page, single spaced ● Title and section headings specified in prompt ● Header and date in correct format ● Page numbers ● 12-point Times New Roman font throughout, including page numbers (except if specified in prompt) ● 1.25" side margins and 1" top margins and .5" bottom margins. ● Citation practices <u>specified</u> in prompt. ● Key terms bolded in first use <p>(V = all correct, X = some mistakes (-10), <u>XX</u> = no conformity (-15))</p> | 15% | **if you can't find the error, come to office hours** |
| Copy editing & use of standard language | Grammar and mechanics are edited for correctness and readability | 5% | |
| Use of AI | AI disclosure statement Quality of author-provided responses and draft Prompts provide relevant information to AI-tool (content and style references, explanation of context) Use of AI responses to improve final version. Analysis of difference between author and AI revision. | 25% | |
| Peer Review | 1.5% for each writer's memo question answered and/or for each substantial comment 2.5% for the following: AI disclosure statement and inclusion of AI prompts/responses Use of AI responses to improve peer review comments Analysis of effectiveness of AI comments | 10% | |
| Overall Comments: | | | |

RE2v2 Writing Prompt

Due Date: Wednesday, February 11, 10pm

For RE2v2 you will revise your RE2v1 essay. This revision should address all the comments of your TA and peer review partner. Your RE2v2 will be graded by your writing lab TA, who will use this rubric (different from the RE2v1 rubric above).

RE2v2 page limit has been increased to 1.5 pages single spaced.

Writing Memo

Please submit a brief statement (5-10 sentences) that describes how you incorporated your TA and peer review partner's feedback and, if appropriate, explains why you did not incorporate any feedback that you chose to ignore.

| Features: | Description: | Range: | Comments on student paper for each feature (noting problems and strengths): |
|---|--|---|---|
| Coverage of issues and information | <p>In making the case for funding the Manhattan Project, be sure to include the following technical content (not necessarily in this order):</p> <ul style="list-style-type: none"> • The definition of (a) a fissionable nuclide, (b) a fissile nuclide and (c) a fertile nuclide. In your explanation, list (d) an example of a fissile nuclide, (e) an example of a fissionable nuclide that is not fissile, and (f) an example of a fertile nuclide. • The definition of (a) a nuclear-explosive nuclide and (b) a nuclear explosive material. Explain (c) whether or not all fissile nuclides are nuclear-explosive nuclides. Explain (d) why some nuclides that are not fissile are nevertheless nuclear-explosive. In your explanation, (e) list an example of an important nuclear-explosive nuclide that is not fissile. • Explain in one or two paragraphs the basic, general requirements for achieving a nuclear explosion using nuclear explosive material. <i>Do not go into any of the details of particular weapon designs.</i> (1/2 of paper) • Explain in (a) one paragraph why the energy released in a nuclear explosion is much greater than the energy released in the explosion of a conventional bomb and in (b) a separate paragraph the magnitude of energy release of a nuclear explosion when deployed strategically. Suggest a concrete scenario for the use of a nuclear weapon in the ongoing war effort (World War II). | <p>25%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |
| Precise and accurate use of concepts | <p>Accurate, clear definitions of:</p> <ul style="list-style-type: none"> • Fissile, fissionable and fertile • NEM, NEN <p>Accurate explanation of:</p> <ul style="list-style-type: none"> • Nuclear explosion using NEM • Energy release greater than conventional bomb | <p>20%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |
| Explanation & argument | <ul style="list-style-type: none"> • Do not forward personal opinion, but approach is persuasive • Technical content is integrated into the persuasive case, suggested military application is realistic. • Explanations use careful logic and evidence in reasoning about concepts and their applications | <p>10%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |

| | | | |
|--|---|---|--|
| Professional style | <p>Geared toward college-educated members of congress.</p> <p>Congruent with Congressional Research Service report style. Language (word choice, sentence structure, flow of information etc.) is precise and straightforward, attending to:</p> <p>Concision, Clarity, Brevity Professional tone Organization</p> <p>Comprehensive and thoughtful use of sources (need both NEM and Slides). - Source info clearly cited. - Uses a mixture of quotation, paraphrase, and summary.</p> | <p>20%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |
| Conformity to conventions | <ul style="list-style-type: none"> ● 1 page, single spaced ● Title and section headings specified in prompt ● Header and date in correct format ● Page numbers ● 12-point Times New Roman font throughout, including page numbers (except if specified in prompt) ● 1.25" side margins and 1" top margins and .5" bottom margins. ● Citation practices specified in prompt. ● Key terms bolded in first use <p>(√ = all correct, X = some mistakes (-10), XX = no conformity (-15)) **If you can't find the error, come to office hours!</p> | <p>15%</p> | |
| Copy editing and use of standard language | <p>Grammar and mechanics are edited for correctness and legibility.</p> | <p>10%</p> <p>High</p> <p>Mid</p> <p>Low</p> | |
| Overall Comments: | | | |

Peer-review how-to

1. Submit your assignment

ASSIGNMENT UPLOAD

[Student Assignments](#) [Admin: Assignment Setup](#) [Admin: Student Upload Log](#) [Admin: Instructor Upload Graded Assignments](#)

Term Code Course Subject Course Number

1 GB maximum file size allowed.

Please ensure the file you're uploading has one of the following file extensions (.doc .docx .xlsx).

Assignment

Upload your assignment
 No file chosen

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>

SECURE DOCUMENT DISTRIBUTION

Enter a title for the file. If you upload multiple files with the same title, they will be grouped together in the Secure Docs portlet.

Enter notes about the file you are uploading.

File Expiration: After this date, the file will no longer be accessible. Default is one month from today.

March 2026

Who can access the file? Enter an AD group or Network ID.

Should a login be required? In other words, should this file be anonymously accessible? Anyone can download and view your file if anonymous access is allowed.

Require login

Password protection: If you allow anonymous access, you can enter a password here to protect the file from anonymous users. You will need to share this password with any anonymous users you wish to have access to the file.

Browse for file to upload

 No file chosen

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>
3. Give your upload title the same name as the assignment

SECURE DOCUMENT DISTRIBUTION

Enter a title for the file. If you upload multiple files with the same title, they will be grouped together in the Secure Docs portlet.

Enter notes about the file you are uploading.

File Expiration: After this date, the file will no longer be accessible. Default is one month from today.

March 2026

Who can access the file? Enter an AD group or Network ID.

Should a login be required? In other words, should this file be anonymously accessible? Anyone can download and view your file if anonymous access is allowed.

Require login

Password protection: If you allow anonymous access, you can enter a password here to protect the file from anonymous users. You will need to share this password with any anonymous users you wish to have access to the file.

Browse for file to upload

 No file chosen

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>
3. Give your upload title the same name as the assignment
4. Enter the NetID of your reviewer **and** the TA in charge of peer-review assignments (ex: Jordi Salinas, NetID: jordis2) in the field below the recipient list and click "Add"

SECURE DOCUMENT DISTRIBUTION

Enter a title for the file. If you upload multiple files with the same title, they will be grouped together in the Secure Docs portlet.

Enter notes about the file you are uploading.

File Expiration: After this date, the file will no longer be accessible. Default is one month from today.

March 2026

Who can access the file? Enter an AD group or Network ID.

Should a login be required? In other words, should this file be anonymously accessible? Anyone can download and view your file if anonymous access is allowed.

Require login

Password protection: If you allow anonymous access, you can enter a password here to protect the file from anonymous users. You will need to share this password with any anonymous users you wish to have access to the file.

Browse for file to upload

 No file chosen

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>
3. Give your upload title the same name as the assignment
4. Enter the NetID of your reviewer **and** the TA in charge of peer-review assignments (ex: Jordi Salinas, NetID: jordis2) in the field below the recipient list and click "Add"
5. Keep "require login"

SECURE DOCUMENT DISTRIBUTION

Enter a title for the file. If you upload multiple files with the same title, they will be grouped together in the Secure Docs portlet.

Enter notes about the file you are uploading.

File Expiration: After this date, the file will no longer be accessible. Default is one month from today.

March 2026

Who can access the file? Enter an AD group or Network ID.

Should a login be required? In other words, should this file be anonymously accessible? Anyone can download and view your file if anonymous access is allowed.

Require login

Password protection: If you allow anonymous access, you can enter a password here to protect the file from anonymous users. You will need to share this password with any anonymous users you wish to have access to the file.

Browse for file to upload

 No file chosen

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>
3. Give your upload title the same name as the assignment
4. Enter the NetID of your reviewer **and** the TA in charge of peer-review assignments (ex: Jordi Salinas, NetID: jordis2) in the field below the recipient list and click "Add"
5. Keep "require login"
6. Keep the password field blank

SECURE DOCUMENT DISTRIBUTION

Enter a title for the file. If you upload multiple files with the same title, they will be grouped together in the Secure Docs portlet.

Enter notes about the file you are uploading.

File Expiration: After this date, the file will no longer be accessible. Default is one month from today.

March 2026

Who can access the file? Enter an AD group or Network ID.

Should a login be required? In other words, should this file be anonymously accessible? Anyone can download and view your file if anonymous access is allowed.

Require login

Password protection: If you allow anonymous access, you can enter a password here to protect the file from anonymous users. You will need to share this password with any anonymous users you wish to have access to the file.

Browse for file to upload

 No file chosen

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>
3. Give your upload title the same name as the assignment
4. Enter the NetID of your reviewer **and** the TA in charge of peer-review assignments (ex: Jordi Salinas, NetID: jordis2) in the field below the recipient list and click "Add"
5. Keep "require login"
6. Keep the password field blank
7. Browse for your draft and upload

SECURE DOCUMENT DISTRIBUTION

Enter a title for the file. If you upload multiple files with the same title, they will be grouped together in the Secure Docs portlet.

Enter notes about the file you are uploading.

File Expiration: After this date, the file will no longer be accessible. Default is one month from today.

March 2026

Who can access the file? Enter an AD group or Network ID.

Should a login be required? In other words, should this file be anonymously accessible? Anyone can download and view your file if anonymous access is allowed.

Require login

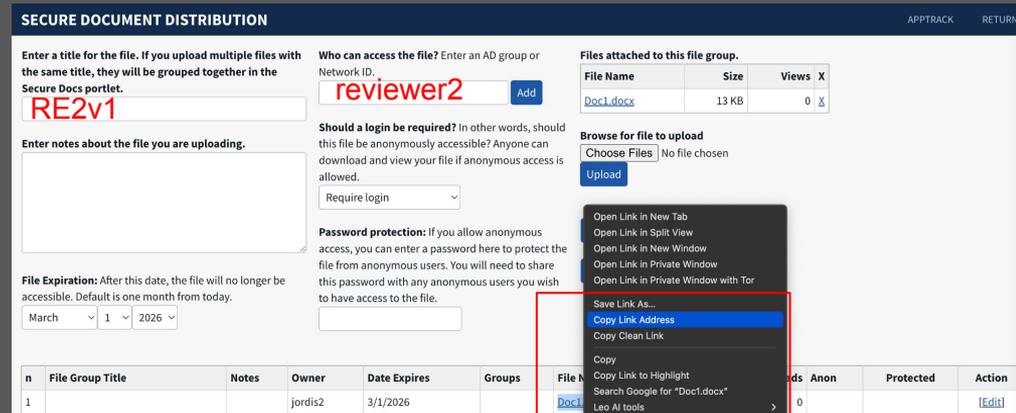
Password protection: If you allow anonymous access, you can enter a password here to protect the file from anonymous users. You will need to share this password with any anonymous users you wish to have access to the file.

Browse for file to upload

No file chosen

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>
3. Give your upload title the same name as the assignment
4. Enter the NetID of your reviewer **and** the TA in charge of peer-review assignments (ex: Jordi Salinas, NetID: jordis2) in the field below the recipient list and click "Add"
5. Keep "require login"
6. Keep the password field blank
7. Browse for your draft and upload
8. Right-Click the file name in the box "Files attached to this file group"; this will open a menu from which you select "copy link" (Firefox) or "copy link address" (Chrome)



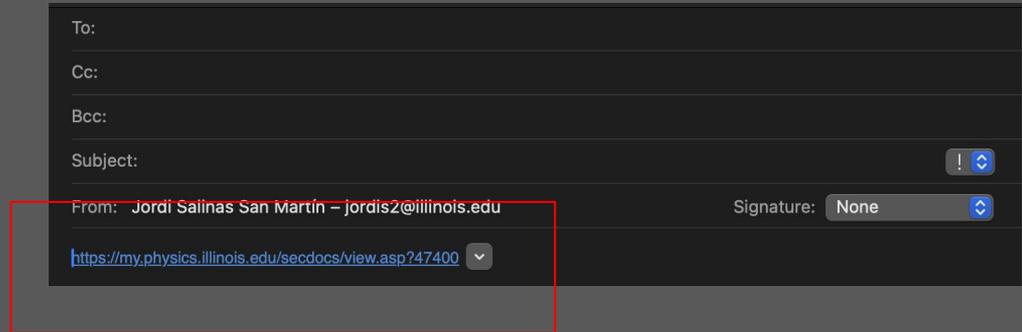
The screenshot displays the 'SECURE DOCUMENT DISTRIBUTION' interface. The main form includes fields for file title (containing 'RE2v1'), notes, and recipient information (containing 'reviewer2'). There are sections for 'Who can access the file?' (set to 'Require login'), 'Should a login be required?' (checked), and 'Password protection'. A 'File Expiration' section shows a date of March 1, 2026. Below the form is a table of attached files:

| n | File Group Title | Notes | Owner | Date Expires | Groups | File Name | Size | Views | Protected | Action |
|---|------------------|-------|---------|--------------|--------|-----------|-------|-------|-----------|--------|
| 1 | | | jordis2 | 3/1/2026 | | Doc1.docx | 13 KB | 0 | | [Edit] |

A context menu is open over the 'Doc1.docx' file name, with 'Copy Link Address' highlighted. The menu options include: Open Link in New Tab, Open Link in Split View, Open Link in New Window, Open Link in Private Window, Open Link in Private Window with Tor, Save Link As..., Copy Link Address (highlighted), Copy Clean Link, Copy, Copy Link to Highlight, Search Google for "Doc1.docx", and Leo AI tools.

Peer-review how-to

1. Submit your assignment
2. Go to <https://my.physics.illinois.edu/secdocs>
3. Give your upload title the same name as the assignment
4. Enter the NetID of your reviewer **and** the TA in charge of peer-review assignments (ex: Jordi Salinas, NetID: jordis2) in the field below the recipient list and click "Add"
5. Keep "require login"
6. Keep the password field blank
7. Browse for your draft and upload
8. Right-Click the file name in the box "Files attached to this file group"; this will open a menu from which you select "copy link" (Firefox) or "copy link address" (Chrome)
9. Paste the link into the email to your reviewer



The image shows a dark-themed email composition interface. The 'From' field is highlighted with a red rectangular box. The 'From' field contains the text 'Jordi Salinas San Martín - jordis2@illinois.edu'. Below the 'From' field, there is a dropdown menu showing the URL 'https://my.physics.illinois.edu/secdocs/view.asp?47400'. Other fields visible include 'To:', 'Cc:', 'Bcc:', 'Subject:', and 'Signature: None'.

To:

Cc:

Bcc:

Subject: ! ⌵

From: Jordi Salinas San Martín - jordis2@illinois.edu

Signature: None ⌵

<https://my.physics.illinois.edu/secdocs/view.asp?47400> ⌵

Questions?

