

AP[°] Seminar End-of-Course Exam

Scoring Guidelines
Set 2

End-of-Course Exam: Part A 15 points

General Scoring Notes

- When applying the scoring guidelines, you should award the score according to the preponderance of evidence (i.e. best fit).
- Except where otherwise noted, each row is scored independently.

0 (Zero)

Scores of 0 are assigned to all rows of the rubric when the response is off-topic; a repetition of a prompt; entirely crossed-out; a drawing or other markings; or a response in a language other than English.

NR (No Response)

A score of NR is assigned to responses that are blank.

Question 1: Argument, main idea, or thesis

limitations of nuclear energy.)

| eporting Category | Scoring Criteria | | | | |
|------------------------|---|---|--|--|--|
| Row 1 | 0 points | 1 point | 2 points | 3 points | |
| nderstand d Analyze | Does not meet the criteria for one point. | The response misstates the author's argument, main idea, or thesis. | The response identifies, in part and with some accuracy, the author's argument, main idea, or thesis. | The response accurately identifies the author's argument, main idea, or thesis. | |
| rgument | | Decision Rules a | nd Scoring Notes | | |
| (0-3 points) | Typical responses that earn 0 points: Are irrelevant to the argument (do not even relate to the topic or subject of the text) | Typical responses that earn 1 point: Misidentify the main argument or provide little or no indication of understanding of any part of the main argument. Just state the topic of the argument. Restate the title or heading. | Typical responses that earn 2 points: Accurately identify only part of the argument (part is omitted or is overgeneralized). Describe all parts, but either vaguely or with some inaccuracy. | Typical responses that earn 3 points: Correctly identify all of the main pa of the argument. Demonstrate understanding of the argument as a whole. | |
| | | Examples that earn 1 point: | Examples that earn 2 points | Examples that earn 3 points: | |
| | | Misidentify the main argument "Other people around the world deserve access to affordable and reliable clean energy." Restate the title or heading "Nuclear could be the clean energy sources the world needs." Scoring note: Responses that only identify part 1 of the argument must score 1 because the entire idea is captured in the title of the article. | Identify only part of the argument "Nuclear energy is a clean option that is more reliable than wind and solar." "The world should adopt Nuclear energy as a clean option but public perception of nuclear energy as dangerous has inhibited its progress." Describe all parts, but either vaguely or with some inaccuracy "Nuclear energy is cleaner and has less problems than other sources | Include all parts of the argument "Nuclear energy is a clean solution to global energy problems because it produces a lot of energy without a large physical footprint and is more reliable than wind and solar. However, fear from the public and politics have slowed down its success." | |
| | Additional Notes | | despite what people think." Scoring note: A response must identify either part 2 or part 3 to receive 2 points. | | |
| | The argument/thesis has three main pa Nuclear energy can be a solution to Nuclear energy is superior to other f | | a specific point of comparison for this part: e | either by stating nuclear energy is better | |

3. There are concerns about the adoption of nuclear energy (Accept: public fear/perceptions of reactors and nuclear waste being dangerous OR any acknowledgment of the

Question 2: Explain line of reasoning

| 6 | points | |
|---|--------|--|
| _ | | |

| Reporting Category | Scoring Criteria | | | | | |
|---|--|---|--|--|--|--|
| Row 2 Understand and Analyze Argument (0-6 points) | O points Does not meet the criteria for two points. | 2 points The response correctly identifies at least one of the author's claims. | 4 points The response provides a limited explanation of the author's line of reasoning by accurately identifying some of the claims AND identifying the connections or acknowledging a relationship among them. | 6 points The response provides a thorough explanation of the author's line of reasoning by identifying relevant claims and clearly explaining connections among them. | | |
| (U-6 points) | Typical responses that earn 0 points: Do not identify any claims accurately. | Typical responses that earn 2 points: Accurately identify only one claim. OR Identify more than one claim but make no reference to connections between them. | Typical responses that earn 4 points: Accurately identify some claims but there are some significant inaccuracies or omissions. AND Provide few or superficial connections between claims (demonstrating a limited understanding of the responsion) | Typical responses that earn 6 points: Accurately identify most of the claims. AND Clearly explain the relationships between claims (including how they relate to the overall argument). | | |
| | Additional Notes A response may evaluate sources and evidence in the second part (Row 2), and/or analyze the argument in the third part (Row 3). Credit should be awarded for this. Author's claims The challenge of meeting the world's energy needs is massive as demand for electricity continues to grow. (Establishes extent of problem) Nuclear energy is a clean option that can meet this challenge. (Sets up nuclear energy as a part of the solution to the problem) There are good reasons organizations have come to see nuclear energy as "clean". (Provides rationale for recognizing nuclear energy as a viable solution) Nuclear power is clean because it produces a lot of energy for its small physical footprint. (Provides comparative rationale for why nuclear is a superior solution to other sources of energy) Wind and solar energy enjoy a better reputation as clean energy sources. (Continues comparative line of reasoning – sets up equivalence between clean energy sources). Both wind and solar require favorable weather conditions and backup power to be online. (Comparison highlighting limitations of other energy sources) Reality is far better than public perceptions of nuclear energy (negative examples of public perception might include discussions on Three-Mile Island, Chernobyl, and Fukushima). (Establishes counter-argument- acknowledges concerns about adoption of nuclear energy). Fear (of nuclear power) has caused unnecessary environmental harm. (Responds to counter-argument) | | | | | |

Question 3: Evaluate effectiveness of the evidence

6 points

| Reporting Category | Scoring Criteria | | | | |
|--------------------------------------|---|--|---|--|--|
| Row 3 Evaluate Sources and Evidence | O points Does not meet the criteria for two points. | 2 points The response identifies little evidence. It makes a superficial reference to relevance and/or credibility but lacks explanation. | 4 points The response explains various pieces of evidence in terms of credibility and relevance, but may do so inconsistently or unevenly. | 6 points The response evaluates the relevance and credibility of the evidence and thoroughly evaluates how well the evidence is used to support the author's argument. | |
| (0-6 points) | | Decision Rules a | nd Scoring Notes | | |
| | Typical responses that earn 0 points: Misidentify evidence or exclude evidence from the response. AND Provide no evaluative statement about effectiveness of evidence. Additional Notes A response may evaluate sources an | Typical responses that earn 2 points: Identify at least one piece of evidence (or source of evidence) but disregard how well it supports the claims. OR Offer broad statements about how well the evidence supports the argument without referencing ANY specific evidence. | Provide a vague, superficial, or perfunctory assessment of how well at least two pieces of evidence support the argument. OR Explain the relevance of evidence or credibility of sources presented, but explanations lack detail. Or analyze the argument in the third part | Provide detailed evaluation of how well the evidence presented supports the argument by Evaluating the strengths and/or weaknesses of the evidence. AND Evaluating the relevance of specific evidence, and credibility of sources of specific pieces of evidence presented. (Row 3) Credit should be awarded for | |

| Summary of Evidence | | | | | |
|--|--|---|--|--|--|
| Source (as provided in text) | Credibility | Evidence/Relevance to claims | | | |
| No Source | No Source | Nearly 1 billion people today still do not have electricity. Supports claim: The challenge to meet the world's energy needs is massive as demand for electricity continues to grow. | | | |
| Clean Energy Ministerial | Annual gathering of energy ministers from 26 countries and the European Commission | Included nuclear energy as a clean energy source and encouraged other energy organizations to do the same. Nuclear can further "economic growth and effective environmental stewardship." Supports the claim that Nuclear energy is a clean option that can meet existing challenges. | | | |
| MIT / Idaho National Lab / University of Wisconsin | | Nuclear energy is "essential" to expand energy access and reduce greenhouse gas emissions. Supports claim: Nuclear energy is a clean option that can meet existing challenges. | | | |
| US Energy Information Association | | In the United States, 19% of the electricity Americans use comes from 97 nuclear reactors, more than in any other country. Establishes context that nuclear power is prevalent in America. | | | |
| World Nuclear Power Association | | 444 commercial nuclear power reactors operating globally; 54 under construction and 111 planned, most notably in China, India and Russia. Establishes context that nuclear energy development is current and widespread. | | | |
| Unclear source reference – could be WNPA | Unclear source reference – could be WNPA | The gigawatts of electricity produced for millions of people by these reactors has emitted no air pollutants. Supports claim that nuclear energy is a clean option that can meet existing challenges. | | | |
| Stevens, Landon, et al. "The footprint of energy: land use of US electricity production" | STRATA (2017) | A single nuclear reactor uses about 13 acres of land space per megawatt, compared to wind (71 acres), solar (44 acres) and hydro (315 acres). This includes land used for mining, transportation, transmission, and storage. Supports claim: Nuclear power is clean because produces a lot of energy for its small physical footprint. | | | |
| Nuclear Energy Institute | | Solar farm would need 45 square miles of land to produce the same amount of electricity as an average nuclear power plant. Wind energy farm would need roughly 260 square miles. Supports claim: Nuclear power is clean because produces a lot of energy for its small physical footprint. | | | |
| US Energy Information Association | | Nuclear reactors are online and generating power 93% of the time, compared with wind (37%) and solar (26%). Supports the idea that Nuclear is an important addition to renewables as its more reliable. | | | |

| United States Nuclear Regulatory Commission | | Most nuclear power plants in the United States are licensed to operate for 60 years. Supports claim that nuclear power has its tradeoffs, but reality is far better than public perceptions of nuclear energy. |
|--|--|---|
| The National Renewable Energy Laboratory | U.S. Department of Energy | Operating life of renewables is roughly half as long (30 years). Supports claim that nuclear power has its tradeoffs, but reality is far better than public perceptions of nuclear energy (the drawbacks of renewables in terms of longevity are worse than nuclear). |
| Kharecha, Pushker A., and James E. Hansen. "Prevented mortality and greenhouse gas emissions from historical and projected nuclear power" | Environmental Science & Technology (2013) | No one has died from radiation exposure from Three Mile Island and Fukushima. Supports claim: Nuclear power has its tradeoffs, but reality is far better than public perceptions of nuclear energy. |
| Unclear source reference – may be Kharecha, Pushker, and Hansen | Unclear source reference – may be Kharecha, Pushker, and Hansen | Nuclear accident at Three Mile Island in 1979: radiation exposure for the 2 million people living closest to the reactor amounted to less than a dental x-ray. Supports claim: Nuclear power has its tradeoffs, but reality is far better than public perceptions of nuclear energy. |
| US Nuclear Regulatory Commission | | State and federal agencies and private companies tested agricultural, health and environmental factors, finding nothing of concern. Supports claim: Nuclear power has its tradeoffs, but reality is far better than public perceptions of nuclear energy. |
| Kharecha, Pushker A., and James E. Hansen. "Prevented mortality and greenhouse gas emissions from historical and projected nuclear power" | Environmental Science & Technology (2013) | UN has confirmed 43 deaths from radiation at Chernobyl, considered the worst nuclear accident in history. Supports claims about why Chernobyl was a unique case (and would not happen in America). This supports the idea that even in its worst case, it is not as bad as public perceptions believe it to be. |
| Michael Shellenberger | Founder of Environmental Progress | Challenged Japanese government's efforts to remove thousands of tons of "contaminated" topsoil. The response was: "Every scientist and radiation expert in the world who comes here says the same thing. We know we don't need to reduce radiation levelsWe're doing it because the people want us to." Supports claim: Fear (of nuclear power) has caused unnecessary environmental harm and costs. |
| The Nuclear Energy Institute | | 81,500 tons of nuclear waste from commercial power reactors in the U.S represents the nuclear waste from every commercial reactor in the U.S. since 1957 — no more than a football field 10 yards deep. |
| | | Supports claim that politics of nuclear waste management inhibited nuclear progress in the United States, but it is a solvable challenge. |

| International Renewable Energy Agency | | Estimates the U.S. will have 170,000 to one million tons of waste from solar panels by 2030. Provides a counter that wind and solar power also have waste disposal issues. |
|--|-----------|---|
| No source | No source | Nuclear industry in Finland is building a deep geologic repository to permanently isolate waste from people and the environment. Supports claim: Politics of nuclear waste management inhibited nuclear progress in the United States, but it is a solvable challenge. |

End-of-Course Exam: Part B 24 points

General Scoring Notes

- When applying the scoring guidelines, you should award the score according to the preponderance of evidence (i.e., best fit).
- Each row is scored independently.

0 (Zero)

A score of 0 is assigned to a single row of the rubric when the response displays a below-minimum level of quality as identified in that row of the rubric.

Scores of 0 are assigned to all rows of the rubric when the response is off-topic; a repetition of a prompt; entirely crossed-out; a drawing or other markings; or a response in a language other than English.

NR (No Response)

A score of NR is assigned to responses that are blank.

| Reporting Category | Scoring Criteria | | | | | |
|--|---|--|--|---|--|--|
| Row 1 Establish Argument (0, 2, 4 or 6 points) | O points Does not meet the criteria for 2 points. | 2 points Misstates or overlooks a theme or issue that connects the sources. The response's perspective is unclear or unrelated to the sources. | 4 points Identifies a theme or issue that connects the sources. The response derives its perspective from only one of the sources. | 6 points The response identifies a theme or issue connecting the provided sources and presents a perspective that is not represented in one of the sources OR brings a particularly insightful approact o one of the perspectives OR makes a strong thematic connection among perspectives. | | |
| | Typical responses that earn 0 points: • Are not related in any way to any theme that connects the provided sources (ignores theme entirely, off-topic). • Do not offer any perspective or claim (generated by the | Typical responses that earn 2 points: Offer a perspective that is unclear. Demonstrate a simplistic or mistaken understanding of the provided sources. May be dominated by summary rather than being driven by the student's perspective. | Typical responses that earn 4 points: Offer a clear perspective that is derived from a single source or present a perspective that juxtaposes topics pulled directly from sources. Offer a reasonable understanding of the provided sources. Present a perspective that is trite, obvious, or overly general. | Typical responses that earn 6 points: Offer a clear perspective that is either original or insightful. Offer a perceptive understanding of the provided sources used. Are driven by the student's perspective. | | |
| | student). Examples that earn 0 points: Ignore the theme entirely • "Taking vacations is a lot of fun." (with no further elaboration that connects thematically) Do not offer a perspective • "Source A talks about Iranian houses. Source D mentions architecture too. Also, source B is a story." | Examples that earn 2 points: Demonstrate a simplistic or mistaken understanding of the sources "Moving is annoying." Are dominated by summary "Houses are usually designed with an interior and exterior design. The layout and design of the house all depends on the land or location and the type of land it's on wether [sic] it is hilly or flat. People also decide where to put their house based on locations near it like a hospital or shopping places to get grocieries [sic]." | Examples that earn 4 points: Derive a perspective from a single source "Housing design should reflect the needs of people in a particular environment." (Source A) "Family is what makes a house a home." (Source B) "Home is important to an individual's identity." (Source C) Present a perspective that is trite, obvious, or overly general "Home is where the heart is." | Examples of that earn 6 points: Offer an original perspective "Long-term residents should be protected from negative impacts of gentrification because long-established homes offer benefits for the wider community." "Where a child grows up can have enormous impacts on the educational opportunities available to them." Offer an insightful perspective "The conception of home for children of immigrants is more abstract that for others because the home represents both physical space and emotional state." "By altering the interior of a home an expat can more easily replicate their familiar culture | | |

| Reporting Category | Scoring Criteria | | | | |
|---|--|---|--|---|--|
| Row 2 Establish Argument (0, 2, 4, or 6 points) | Typical responses that earn 0 points: Are not related in any way to a theme that connects the provided sources (off-topic). Do not offer any claim (generated by the student) and/or no line of reasoning is present. | 2 points The line of reasoning is disorganized and/or illogical. The response lacks commentary, or the commentary incorrectly or tangentially explains the links between evidence and claims. Decision Rules at Typical responses that earn 2 points: Summarize the provided sources without linking them to one another or to an argument. Offer very general or confusing commentary, if any, connecting evidence and claims. Have a line of reasoning that fails. | 4 points The argument is mostly clear and organized, but the logic may be faulty OR the reasoning may be logical but not well organized. The commentary explains the links between evidence and claims. Ind Scoring Notes Typical responses that earn 4 points: Are organized well enough to discern the argument. Provide inconsistent or incomplete explanations linking evidence and claims. Make a claim that may be only partially supported. Have a line of reasoning that is difficult to follow at times. | 6 points The line of reasoning is logically organized and well-developed. The commentary explains evidence and connects it to claim to clearly and convincingly establish an argument. Typical responses that earn 6 points: Are driven by the argument; points a intentionally ordered AND the links between claims and evidence are logical and convincing. Are thoughtful or sophisticated (e.g., may address a counterargument, or discuss limitations or implications). Have a sound line of reasoning. | |
| | Examples that earn 0 points: Are not related to the theme "I have a nice car. People like it, but it's hard to drive." Do not offer claims to establish a line of reasoning "Sources A and C both talk about how a house is for families and sharing spaces. C talks about the layout of an house, pointing out the features and how they can be for entertaining guest or anyone inside." | Examples that earn 2 points: Often stack overly general summaries of the sources without linkage to claims • "In Source A, they say that Iranians try to bring the outside into their houses. Source B talks about losing a home. Source D is about living in other countries. This is why homes are important." | Examples that earn 4 points: Often jump from one claim to the next without providing a clear, logical connection between the claims • "A house is not a home. People make their houses into homes. In places like Iran and Turkey, homes are different from how they are in the West (Source A). If you feel at home, it doesn't matter that the house is big or little. It just depends on what you want." Often provide less than clear linkage between material from a source and their arguments' claims • "What is at a place makes it a home. What defines a home is the people you are with. Home is a place where you are safe, secure, and unguarded (Sources A and C). Some people say houses that aren't big and fancy are not very nice houses, but they could still be nice homes." | Examples that earn 6 points: Have a line of reasoning that is made explicit in logical transitions that connect arguments in a thoughtful manner • "As I've argued, those who suffer from home insecurity are vulnerable to extreme weather, but that is not their only challenge. They are also vulnerable to the stigma associated with their situation." • "We cannot devalue the sense of identity that seniors associate with the homes. Therefore, we must think seriously about the best way to help seniors transition into a new living space when they can no longer take care of themselves at home." Use insightful commentary to connect claims and evidence • "The conception of a home differs from culture to culture. For example, we learn from Source A, "Some societiesmay value the privacy of the house" while others see a home as a space more open to the surrounding community." | |

| "How we decorate our ho | mes has an |
|-----------------------------|----------------|
| impact on our well-being. | Source C |
| supports this claim by poi | nting out that |
| people display photos of I | oved ones in |
| their homes in order to "fi | end off |
| feelings of loneliness and | social |
| isolation."" | |

Additional Notes

- Line of Reasoning is "an arrangement of claims and evidence that leads to a conclusion."
- Commentary is "a discussion and analysis of evidence in relation to the claim which may identify patterns, describe trends, and/or explain relationships."

| Reporting Category | Scoring Criteria | | | | |
|---|--|--|--|--|--|
| Row 3 elect and Use Evidence (0, 2, 4, or 6 points) | O points Uses one or none of the provided sources. Typical responses that earn O points: Use only one of the provided sources. | Typical responses that earn 2 points: Draw obviously mistaken conclusions | 4 points Accurately uses relevant information from at least two of the provided sources to support an argument. nd Scoring Notes Typical responses that earn 4 points: Present evidence that adequately | 6 points Appropriately synthesizes relevant information drawn from at least two of th provided sources to develop and support compelling argument. Typical responses that earn 6 points: Fully integrate the source materials in | |
| | Do not make use of any of the provided sources. | from the sources. Mismatch claims and evidence. Offer evidence that has no bearing on the claims made. | supports assertions. Use quotations or paraphrases that generally match the claims. Interpret the sources in a way that does not substantially contribute to the argument; may pull data or information from the sources but do not utilize that information in a thoughtful or insightful way. | the argument and put the sources int conversation with one another. May use a source to clarify points main a second source, or to make a contrasting point, which is woven int the argument. Present evidence invoked to support the writer's argument; the evidence in the argument itself. Interpret the evidence in a way that adds substantially to the argument. | |
| | | Examples that earn 2 points: Draw mistaken conclusions from the | Examples that earn 4 points: | Examples that earn 6 points: | |
| | | Sources "In Source B, the family is happy because they get to move to a new apartment." Mismatch claims and evidence "In Source C, Karen says, "Their home is out of a suitcase," which is like my brother's apartment. He never cleans and I hate it. "The main character is a snail who takes his home with him wherever he goes (Source C)." | Use quotations or paraphrases that generally match the claims "It is said that "home is a composite of the building itself and that life that unfolds within it" (Source A) This just goes to show how home is more emotional than physical." "Another reason why feeling at home can help someone thrive is because they feel "unguarded and relaxed" (Source A). In a house the four walls could just be four walls. But in a home, a person's shield can be taken down, walls lifted and they can act true to their character." | Provide a thoughtful reading of the source in light of their context "In her novel Maude Martha, written 1953, Gwendolyn Brooks provides enduring insight into the difference between a house and a home when sh has a character say, "It's us he loves. wouldn't want the house, except for us."" Put sources in conversation with each otlem of the word of the second of the proposed by Source A and B, immigrate experience much more of this because they have spent a long time living in the or more different places. For instance, Karen, a British citizen who lives now Malaysia, discusses how she and her husband don't truly "see [the country as home," still believing that "their actual home" is in Europe (Source D)." | |

| Reporting Category | Scoring Criteria | | | | |
|---|--|--|---|--|--|
| Row 4 Apply Conventions (0, 2, 4 or 6 points) | O points Does not meet the criteria for 2 points. | 2 points Contains many flaws in grammar and style that often interfere with communication to the reader OR the response incorrectly or ineffectively attributes knowledge and ideas from sources. | 4 points Is generally clear but contains some flaws in grammar and style that occasionally interfere with communication to the reader. The response accurately attributes knowledge and ideas from sources. | 6 points Communicates clearly to the reader (although may not be free of errors in grammar and style) AND the response effectively integrates material from sources into the argument (e.g. it is clearly introduced, integrated, or embedded into the text) and accurately attributes knowledge and ideas. | |
| | | Decision Rule | es and Scoring Notes | | |
| | Typical responses that earn 0 points: Are not related in any way to a theme that connects the provided sources (off- topic). Response does not provide enough writing to assess. | Use grammar and syntax that is so clumsy as to make the meaning difficult to decipher. Require multiple readings to uncover meaning or intent. Use blatant unattributed paraphrases and/or there is an absence of sources/quotation marks/reference to sources or their authors. | Typical responses that earn 4 points: Are written in a style that is adequate, if sometimes clunky, but conveys basic meaning. May contain multiple misspellings or other errors, but not so many as to impede understanding. May attempt elevated word choice but may be incorrect, or may lapse into colloquial language. Lacks integration of sources. Refer to sources/authors and use quotation marks or paraphrases appropriately. | Feature writing that enhances the argument, are easy to read, and concise. Grammar and syntax need not be perfect. May demonstrate an understanding of the context of the provided sources. Weave source material effectively into the argument's composition. Accurately cite sources (use quotation marks and paraphrases correctly). | |
| | Examples that earn 0 points: Are off-topic • "It's a nice day outside. My mother is walking our dog today. Have a nice day!" | Examples of that earn 2 points: Demonstrate writing that impedes understanding • "Another reason why as house really dosent mean much is as long as you have cloths and what not you will be fine. SOciety belives that your home is your home as it does have some sentimental value to it, its never that hard to pick up and go somewere else as long as your with family nd are set." On multiple occasions, omit attribution and/or citation • "Architects have thought about the reasons that go into a home's appearance. This is really interesting because some places value privacy while others value a more communal center. All of this means that its important to think about the places we call home." | Examples that earn 4 points: Demonstrate writing that may be awkward, wordy, or grammatically incorrect, but these flaws do not impede understanding • "Since birth, you're life gets planned out, so you go to various schools, and you get a job and then you retire. This isn't exactly the "American Dream" but it is a life that pretty much everyone gets. The best part of all of this is living in a stable home, living where you feel comfortable or safe. This is why the story (Source B) is so sad. People have their comfort and safety, but then its gone" | Examples that earn 6 points: Demonstrate writing that is clear, concise, and compelling "With many divisions within a house, there is less chance for individuals to spark conversation or feel the need to connect with other people. In contrast, homes from the Middle East, such as Iran, "value nature and the open air" as well as "living together and sharing spaces" (Barone). This can help promote a sense of community as there are more open spaces for people to congregate and communicate with each other which could not be possible with closed off walls that prohibit human connection." | |

| Omit quotation marks "Source A says Some societies may orientate their houses towards a communal center. This is because of many reasons." |
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