23Phys280 RE3v2 rubric:

No hard copy submitted: -5 RE3v2 submitted late electronically: -15 No writer's memo: -10

No RE3v1 + TA-commented rubric attached: -10

| Features: | Description: | Range | Comments on student paper for each feature (noting problems |
|-------------------|--|-------|---|
| | | : | and strengths): |
| Coverage of | Includes the following: | 20% | |
| issues and | 1. A brief summary. | | |
| information | 2. An introductory paragraph that describes some of the most | High | |
| | important nuclear-explosive nuclides. | | |
| -2% per issue not | 3. A paragraph that (a) lists the isotope requirements for making a | Mid | |
| covered | uranium weapon, (b) lists the technologies currently available to | | |
| | produce uranium that meets these requirements, and (c) notes | Low | |
| | and describes the particular technology that is currently favored. | | |
| | 4. A paragraph that describes the simplest way to create a nuclear | | |
| | explosion using weapons-grade uranium. | | |
| | 5. A paragraph that lists the usually quoted isotope requirements | | |
| | for making a plutonium weapon and describes the technologies | | |
| | used to produce plutonium that meets these requirements. | | |
| | 6. A paragraph that describes how to create a nuclear explosion | | |
| | using weapons-grade plutonium. | | |
| | 7. A paragraph that explains why the production method that is | | |
| | optimal for producing weapons-grade plutonium is incompatible | | |
| | with efficient power generation. | | |
| | 8. A paragraph that describes why it is more difficult to make a | | |
| | bomb using reactor-grade plutonium than using weapons-grade | | |
| | plutonium. Indicate whether it is possible to create a nuclear | | |
| | explosion using reactor-grade plutonium. | | |
| | 9. A final paragraph that explains briefly why restricting the | | |
| | availability of nuclear explosive nuclides is the most effective | | |
| Precise and | way to prevent the spread of nuclear weapons. Course concepts from lecture and readings are employed clearly, | 15% | |
| | accurately, and with a sufficient level of detail (i.e. quantified) in service | 15% | |
| accurate use of | of the above objectives. | Lligh | |
| concepts | of the above objectives. | High | |
| | | Mid | |
| | | Low | |
| Explanation & | Rationale for arguments (particularly regarding sections 3c, 4, 7, 8, and 9) | 15% | |
| argument | is clear and convincing. (-2% for each of the four sections not satisfied) | | |
| | | High | |
| | | Mid | |
| | | | |
| | | Low | |

| Professional | Geared toward college-educated members of congress. | 10% | |
|------------------|--|------|--|
| style | Congruent with Congressional Research Service report style. Language | | |
| • | (word choice, sentence structure, flow of information etc.) is precise and | | |
| | straightforward, attending to: | High | |
| | Concision | - | |
| | Clarity | Mid | |
| | Brevity | | |
| | Professional tone | Low | |
| | Organization | | |
| | Comprehensive and thoughtful use of sources (need all three). | | |
| | - Source info clearly cited. | | |
| | - Uses a mixture of quotation, paraphrase, and summary. | | |
| Conformity to | 1.5-2 pages (single-spaced) | 10% | |
| conventions | Title and section headings specified in prompt | | |
| | Header and date in correct format | | |
| | Page numbers | High | |
| | 12-point Times New Roman font throughout (including page numbers) | | |
| | 1.25" side margins and 1" top margins and .5" bottom margins. | Mid | |
| | Citation practices specified in prompt. | | |
| | Key terms bolded in first use | Low | |
| | (check = all correct, x = some mistakes (-10)) | | |
| | **If you can't find the error, come to office hours! | | |
| Copy editing and | Grammar and mechanics are edited for correctness and legibility. | 5% | |
| use of standard | | High | |
| language | | | |
| | | Low | |
| Quality and | | 25% | |
| thoughtfulness | | | |
| of revision and | | High | |
| rationale | | | |
| | | Mid | |
| | | Low | |
| Overall Comments | J;: | 1 | |
| | | | |
| | | | |