

Walter Wesley Memorial Scholarship

Purpose	To encourage excellence in physics.
Award	\$1000
Eligibility	<ul style="list-style-type: none"> • Must be a MSUM physics major • Must have completed a minimum of one year of physics courses • Must be enrolled in the physics program in Fall 2009 when the funds will become available.
Application	<ul style="list-style-type: none"> • Due Wednesday, March 25, 2009 to Joy Lindell, Hagen 307
Essay content	<ul style="list-style-type: none"> • Write an essay answering the question <p>“Has physics improved the quality of life for humankind? Why or why not?”</p> <p>Write to an audience of scientifically informed non-specialists. For examples of this level, see publications such as <u>Science News</u>, the science column of the <u>New York Times</u>, or the science articles of the <u>Economist</u>.</p> <ul style="list-style-type: none"> • The essay should clearly explain at least one relevant physics idea or concept. • The essay should logically develop the writer’s view on the question.
Essay format	<ul style="list-style-type: none"> • Include a cover page with your name and essay title. • Do not put your name on the essay itself, to facilitate evaluation. • Include page numbers. • The paper should be double-spaced and use 12 point font. • The essay text should be no longer than eight pages (approximately 2000 words). Shorter essays are welcome!
Tips	<ul style="list-style-type: none"> • Read the scoring criteria (next page) • Ask any faculty member for clarification of criteria • Do not use: <ul style="list-style-type: none"> ○ I, I feel, I think, as I said, In conclusion, as I have shown, as I have proven. • Do not tell what is going to be discussed or what the essay is about, just write the essay.

Score	Criteria
5 or 6	<p>Essays in this category will show a confident understanding of physics concepts, will teach those concepts clearly to a scientifically informed audience of non-specialists, and will effectively support the writer's position on the essay question.</p> <p><u>A level 6 essay</u> will be clearly written; will contain almost no errors in spelling, punctuation, or grammar; and will effectively teach the necessary physics concepts to non-specialists. The writer's point of view on the question will be logically developed, and effectively argued.</p> <p><u>A level 5 essay</u> will still be successful in explaining the physics concepts to a non-specialist, but may have more errors or be somewhat less developed than a 6. The writer's point of view of the question may be not be as strongly supported or well developed as a 6.</p>
3 or 4	<p>Essays in this category will reveal that the writer has some grasp of the physics, but lack of clarity in writing or lack of fully developed explanations means that the essay would probably not effectively teach the physics concept. Someone who does not already understand the physics would probably not understand the explanation.</p> <p>Essays in this category will show that the writer has some idea of how to logically argue a position, but will have minor logical weaknesses. Someone who does not already agree with the writer's position might not be convinced by their position.</p> <p>This category is appropriate for clearly written essays full of sentence-level errors.</p>
1 or 2	<p>Essays in this category are unsuccessful either because the writer fails to understand the underlying physics concepts, or because the explanations lack even minimal development. Give 1 or 2 if the writer misunderstands the physics, even if the essay is otherwise well-written.</p> <p>If the writer's position on the essay question is based on incorrect deductive or inductive reasoning, or incorrect data, give a 1 or 2.</p>