## Why Teach Physics?

Some thoughts for justification of inclusion of physics in the school curriculum.

## Physics 310 READINGS FOR TEACHING HIGH SCHOOL PHYSICS Illinois State University Physics Teacher Education Program Carl J. Wenning, Program Coordinator Spring Semester 2004

- 1. Knowledge needed to control and exploit the forces of nature (proves a sense of empowerment)
- 2. to satisfy human curiosity
- 3. to understand the body of knowledge we call science so that we may choose between good and bad applications
- 4. to become aware of nature and its limitations
- 5. helps to avoid alienation from the technological world
- 6. since science is a predominant force, it helps understand our world
- 7. helps us to distinguish between fact and fiction (knowledge is power)
- 8. helps us to lead healthier and safer lives
- 9. promotes a scientific attitude
- 10. provides us with a competent work force to maintain economic growth
- 11. study builds problem-solving skills
- 12. study illustrates the greatest of human accomplishment
- 13. study generates openness to new ideas
- 14. physics provides the simplest of systems to study
- 15. physics provides content relevant to other fields of study
- 16. physics has shaped history
- 17. physics is important to the educated person part of liberal education
- 18. provides common basis for discussion and understandings
- 19. helps us to understand our own limitations and capabilities
- 20. assists us in our stewardship of planet earth
- 21. helps us gain insight into how people have explained the physical world
- 22. study helps us to become better consumers we won't get ripped off by outlandish claims
- 23. helps us see that nature is inherently comprehensible
- 24. helps us become masters of our own fate
- 25. helps us understand and relate to technological applications of physics
- 26. physics provides numerous examples of <u>simple</u> systems to study with clear underlying principles that are broadly applicable, and free from all the complexities of biology and chemistry