

Illinois Academic Standards for Middle and High School

HEALTH EDUCATION: Middle/Junior High School

STATE GOAL 22: Understand principles of health promotion and the prevention and treatment of illness and injury.

Why This Goal Is Important: Nutrition, exercise, rest, hygiene and safety are the bases for personal, family and occupational health. From an early age, students can recognize healthy habits and understand why they are important. As students become more sophisticated in their understanding, they learn and can adopt a variety of ways to minimize illness and enhance health. Learners will be able to apply the effects of health-related actions to success in the workplace. Students who develop an effective understanding of basic health promotion can establish the foundation for achieving and maintaining personal health and well-being by making informed wellness decisions now and throughout their lives.

A. Explain the basic principles of health promotion, illness prevention and safety.

22.A.3b

Identify how positive health practices and relevant health care can help reduce health risks (e.g., proper diet and exercise reduce risks of cancer and heart disease).

B. Describe and explain the factors that influence health among individuals, groups and communities.

22.B.3

Describe how the individual influences the health and well-being of the workplace and the community (e.g., volunteerism, disaster preparedness, proper care to prevent the spread of illness).

C. Explain how the environment can affect health.

22.C.3a

Identify potential environmental conditions that may affect the health of the local community (e.g., pollution, land fill, lead-based paint).

22.C.3b

Develop potential solutions to address environmental problems that affect the local community's health.

SCIENCE: Middle/Junior High School

STATE GOAL 12: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences.

Why This Goal Is Important: This goal is comprised of key concepts and principles in the life, physical and earth/space sciences that have considerable explanatory and predictive power for scientists and non-scientists alike. These ideas have been thoroughly studied and have stood the test of time. Knowing and being able to apply these concepts, principles and processes help students understand what they observe in nature and through scientific experimentation. A working knowledge of these concepts and principles allows students to relate new subject matter to material previously learned and to create deeper and more meaningful levels of understanding.

- A. Know and apply concepts that describe how living things interact with each other and with their environment.

12.B.3a

Identify and classify biotic and abiotic factors in an environment that affect population density, habitat and placement of organisms in an energy pyramid.

12.B.3b

Compare and assess features of organisms for their adaptive, competitive and survival potential (e.g., appendages, reproductive rates, camouflage, defensive structures).

STATE GOAL 13: Understand the relationships among science, technology and society in historical and contemporary contexts.

Why This Goal Is Important: Understanding the nature and practices of science such as ensuring the validity and replicability of results, building upon the work of others and recognizing risks involved in experimentation gives learners a useful sense of the scientific enterprise. In addition, the relationships among science, technology and society give humans the ability to change and improve their surroundings. Learners who understand this relationship will be able to appreciate the efforts and effects of scientific discovery and applications of technology on their own lives and on the society in which we live.

- B. Know and apply concepts that describe the interaction between science, technology and society.

13.B.3d

Analyze the interaction of resource acquisition, technological development and ecosystem impact (e.g., diamond, coal or gold mining; deforestation).

13.B.3e

Identify advantages and disadvantages of natural resource conservation and management programs.

13.B.3f

Apply classroom-developed criteria to determine the effects of policies on local science and technology issues (e.g., energy consumption, landfills, water quality).

HEALTH EDUCATION: Early High School

STATE GOAL 22: Understand principles of health promotion and the prevention and treatment of illness and injury.

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A. Explain the basic principles of health promotion, illness prevention and safety.

22.A.4b

Analyze possible outcomes of effective health promotion and illness prevention (e.g., reduction in stress, improved fitness, lessened likelihood of injury and illness).

B. Describe and explain the factors that influence health among individuals, groups and communities.

22.B.4

Explain social and economic effects of health problems on individuals and society (e.g., cost of health care, reduction in productivity).

C. Explain how the environment can affect health.

22.C.4

Analyze how environmental conditions can affect health on a large scale (e.g., acid rain, oil spills, solid waste contamination, nuclear leaks, ozone depletion).

SCIENCE: Early High School

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- B. Know and apply concepts that describe how living things interact with each other and with their environment.

12.B.4a

Compare physical, ecological and behavioral factors that influence interactions and interdependence of organisms.

12.B.4b

Simulate and analyze factors that influence the size and stability of populations within ecosystems (e.g., birth rate, death rate, predation, migration patterns).

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- B. Know and apply concepts that describe the interaction between science, technology and society.

13.B.4c

Analyze ways that resource management and technology can be used to accommodate population trends.

13.B.4d

Analyze local examples of resource use, technology use or conservation programs; document findings; and make recommendations for improvements.

HEALTH EDUCATION: Late High School

STATE GOAL 22: Understand principles of health promotion and the prevention and treatment of illness and injury.

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- A. Explain the basic principles of health promotion, illness prevention and safety.

22.A.5a

Explain strategies for managing contagious, chronic and degenerative illnesses (e.g., various treatment and support systems).

22.A.5b

Evaluate the effectiveness of health promotion and illness prevention methods using data from actual situations (e.g., impact of worksite health promotion programs).

22.A.5c

Explain how health and safety problems have been altered by technology, media and medicine (e.g., product testing; control of polio; advanced surgical techniques; improved treatments for cancer, diabetes and heart disease; worksite safety management).

B. Describe and explain the factors that influence health among individuals, groups and communities.

22.B.5

Analyze how public health policies, laws and the media function to prevent and control illness (e.g., product and food labeling, food safety and handling, school immunizations).

C. Explain how the environment can affect health.

22.C.5

Compare and contrast how individuals, communities and states prevent and correct health-threatening environmental problems (e.g., recycling, banning leaf burning, restaurant inspections, OSHA standards in the workplace).

SCIENCE: Late High School

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B. Know and apply concepts that describe how living things interact with each other and with their environment.

12.B.5a

Analyze and explain biodiversity issues and the causes and effects of extinction.

12.B.5b

Compare and predict how life forms can adapt to changes in the environment by applying concepts of change and constancy (e.g., variations within a population increase the likelihood of survival under new conditions).

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B. Know and apply concepts that describe the interaction between science, technology and society.

13.B.5c

Design and conduct an environmental impact study, analyze findings and justify recommendations.