

Introduction to the Health Science Curriculum

OVERVIEW:

This innovative high school health science curriculum seeks to develop among students the motivation and critical thinking skills necessary for any career in health sciences. The engaging lessons use problem-based and project-based learning modalities to reach learners at all levels with authentic case scenarios and real-world health problems. Whether students plan to enter technical training, college, or professional/graduate-level studies, the curriculum will prepare them to be thoughtful, data-driven leaders and agents of change who strive to improve health outcomes in their communities.

CURRICULUM ORGANIZATION:

SCOPE:

- Sixteen modules (6-10 weeks each)
- Modules include 8-10 Daily lessons + 1-3 Case studies + Assessments
- Adaptable for grade levels 9-12.

STANDARDS:

- Illinois Physical Development & Health Standards
- CDC National Health Education Standards
- ACT College Readiness Standards (CRS)
- Common Core ELA/Literacy Standards
- Next Generation Science Standards

IMPLEMENTATION:

- **Flexible:** Use entire curriculum, free-standing modules, or pull-out individual lessons & case studies.
- **Free:** Student workbooks can be photocopied or accessed by students via computer/tablet (paperless).

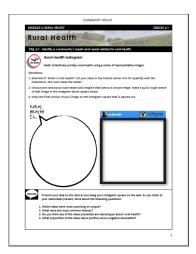
EXPOSURE

- A broad range of health professions are represented.
- Offers both Micro (individual) & Macro (population) approach to health

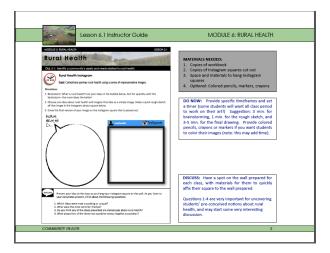
Overview of Modules

CURRICULUM COMPONENTS:

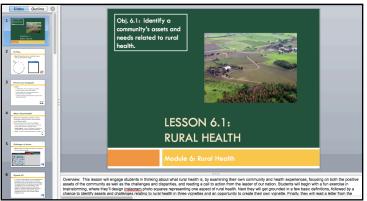
The curriculum contains the following resources:



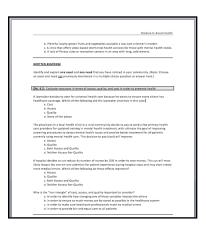
Student Workbook: Includes space for student note-taking & answers.



Instructor Guide: Annotated version of student workbook serving as lesson plan



PowerPoints: Annotated presentation of lesson & information, follows the flow of the workbook lesson



Assessment Item Banks

Objective/Lesson	CDC NHES Standard	IL Phys Dev & Health Standards
6.1: Identify a	NHES 2.12.2: Analyze how culture supports	
community's assets and	and challenges health beliefs, practices,	
needs related to rural	and behaviors.	
6.2: Evaluate resources in		
	NHES 2.12.10: Analyze how public health	22.B.5: Analyze how public health
terms of access, quality,	policies and government regulations can	policies, laws and the media function
and cost in order to	influence health promotion and disease	to prevent and control illness (e.g.,
promote health and prevent disease.	prevention.	product and food labeling, food safety
		and handling, school immunizations).
6.3: Examine poverty-	NHES 5.12.1: Examine barriers that can	23.B.5: Understand the effects of
related barriers that can	hinder healthy decision making.	healthy living on individuals and their
hinder healthy living.		future generations (e.g., not using
		alcohol, tobacco, and other drugs
		during pregnancy).
6.4 Identify risk factors	NHES 1.12.5: Propose ways to reduce or prev	
and preventative	injuries and health problems.	managing contagious, chronic and
strategies for reducing	NHES 8.12.3: Work cooperatively as an advoc	
chronic disease.	for improving personal, family, and communi health.	treatment and support systems).
	NHES 8.12.4: Adapt health messages and	
	communication techniques to a specific	
	target audience.	
6.5: Analyze risk factors	NHES 1.12.8: Analyze personal	24.8.5: Explain immediate and long-
for unintentional injuries	susceptibility to injury, illness, or death if	term impacts of health decisions to
in order to provide safety	engaging in unhealthy behaviors.	the individual, family and community.
recommendations.	NHES 1.12.8: Analyze potential severity of	
	injury or illness if engaging in unhealthy	
	behaviors	
6.6: Analyze the	NHES 1.12.6: Analyze the relationship	22.8.5: Analyze how public health
relationship between	between access to health care and health	policies, laws and the media function
access to care and health	status.	to prevent and control illness (e.g.,
status for migrant		product and food labeling, food safety
workers		and handling, school immunizations).
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Standards Alignment

Overview of Modules

#	Focus	Topics	
1	Mental Health	Thematic Lessons: Dimensions of health, Self-concept, Stress, Depression, Determinants of health, Stigma, Mental illness. Skill Lessons: SOAP notes, Asking questions. Case Studies: PTSD, Bulimia, Bullying.	
2	Nutrition & Fitness	Thematic Lessons: Nutrients, Digestion, Food labels, Dietary guidelines, Food marketing, What's in a drink?, exercise, Body mass index. Skill Lessons: Vital signs, web literacy. Case Studies: Adult obesity, Childhood obesity.	
3	Drugs & Addiction	Thematic Lessons: Addiction, Barriers to change, Drugs of abuse, Tobacco, Alcohol, Marijuana, Prescription drugs, Substance abuse treatment. Skill Lessons: Graphing, Factor-outcome webs. Case Studies: Cocaine abuse, Teen substance abuse.	
4	Sexual Health	Thematic Lessons: Sex, gender, & sexuality, Male & female reproductive systems, Pregnancy, Abstinence, Contraception, STIs. Skill Lessons: SAMPLE history, Conducting interviews. Case Studies: Ectopic pregnancy, Adolescent sexual health (teen pregnancy & STIs).	
5	Public Health	Thematic Lessons: What is community?, What is public health?, Social-ecological model, Communicable vs Noncommunicable disease, Risk factors, Prevention, Vaccinations. Skill Lessons: Differential diagnosis, Scholarly journals. Case Studies: Sickle cell disease, Influenza.	
6	Rural Health	Thematic lessons: Intro to rural health issues, Access, quality, & cost in healthcare, Rural poverty, Chronic disease, Preventable injuries, Migrant worker health, Mental health, Telemedicine. Skill Lessons: OPQRST symptom assessment, Survey design. Case Studies: Heart disease, Telememental health.	
7	Violence	Thematic Lessons: Intro to violence, Social work, Gun violence, Intimate partner violence, Child maltreatment, Elder abuse, Suicide, Electronic aggression. Skill Lessons: Plan (SOAP note), Asset maps. Case Studies: Elder abuse, School violence prevention.	
8	Pharmacy	Topical Lessons: Intro to pharmacy, Pharmacy settings, Types of medications, Prescription painkiller abuse, Pharmacy ethics, Cultural competency, Medication adherence. Skill Lessons: Teach back method, Tech & health. Case Studies: Asthma, Community Pharmacy.	
9	Epidemiology	Thematic Lessons: Cholera & John Snow, History of Epidemics, 1918 Flu, Epidemiology. Skill Lessons: Types of Studies, Correlation vs. Causation, Relative Risk, Conclusions. Case Studies: Foodborne Illness, Lyme Disease.	
10	Environmental Health	Thematic Lessons: Intro to Environmental Health, Chemical Hazards, Air Quality, Radiation, Climate & Health, Lead Poisoning, Environmental Justice, Asthma. Skill Lessons: Searching Google Scholar. Case Studies: Carbon Monoxide, Environmental Health.	
11	Health Policy	Thematic Lessons: Access to healthcare, Rights vs responsibilities, Health insurance, Affordable Care Act, Health laws, Underinsured, US health care system, Healthcare models; Case Study: HPV	
12	Health Disparities	Thematic Lessons: Health Disparities Introduction (2 parts), Infant & Child Health, Chronic Stress, Education, Food Security, Income, Race & Racism. Case Study: Health Disparities Research	
13	Global Health	Thematic Lessons: Intro to Global Health, Parasitic Infections, Clean Water, Hunger & Malnutrition, Global Poverty, HIV/AIDS, TB, & Malaria, Maternal & Child Health. Skill Lessons: Oral Presentation Skills. Case Studies: Global Health Case Study	
14	Anatomy & Physiology	Case studies: Integumentary, Musculoskeletal, Nervous, Digestive, Circulatory, Respiratory, & Reproductive Systems	
15	Health Careers	Focus Areas: Applied Health Sciences, Dentistry, Informatics, Nursing, Medicine, Public Health, Pharmacy, Social Work, Veterinary Science	
16	Capstone	Individual Research Project Guide; Mentorship & Community Partner Involvement Toolbox, Survival Skills Portfolio; Real World 101	