

2011 Alliance of Nurses for Healthy Environments (ANHE): Environment, Health and BSN Curricula

<p>Specific Classes/General Content Areas in BSN Curricula CONSIDER ADDING A COURSE OBJECTIVE OR PART OF OBJECTIVE TO ENCOURAGE FACULTY TO INCLUDE IT</p>	<p>Appropriate Environmental Health Content</p>	<p>Teaching Strategies and Resources (ex. readings, questions, assessments, research articles, power points, etc. What might we suggest for strategies)</p>	<p>Related Environmental Health Competencies from Bold objectives below are from ANA (2010) <i>Scope and standards of practice: Nursing</i>. Additional objectives are from The Alliance of Nurses for Healthy Environments (ANHE) (2009).</p>
<p>Fundamentals in Nursing</p>	<p>Avoidance of mechanical, biological, chemical, and radiological hazards: Body mechanics Needle stick prevention Infection: multi drug resistance, nosocomial Equipment cleaning: Chemicals used for cleaning patient care equipment; Material safety data sheets (MSDS) Radiological exposure Medication waste (taught when med administration is taught) Personal care products Battery recycling Waste management Avoid scented products (including air</p>	<p>Check QSEN site for anything that might apply.</p> <p>Identify which personal care products have ingredients that can have human health effects. See Environmental Working Group’s <i>Skin Deep</i> site. http://www.cosmeticsdatabase.com/</p>	<p>Attains knowledge of EH concepts, such as implementation of EH strategies.</p> <p>Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers.</p> <p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies.</p> <p>Assesses the practice environment for factors such as sound, odor, noise and light that negatively affect health.</p> <p>Reduces environmental health risks in the health care setting (chemical, biological, radiological [and mechanical])</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential</p>

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	<p>fresheners)</p> <p>Patient assessment</p>		<p>environmental threat.</p> <p>Advocates for the judicious and appropriate use of products used in health care.</p> <p>Communicates environmental risks and exposure reduction strategies to health care consumers, families, colleagues and communities.</p> <p>Collaborates with others to create and implement strategies that promote health environments.</p> <p>Promotes a healthy environment that respects the diverse values, beliefs, cultures, and circumstances of patients, their families and communities.</p>
<p>Health Assessment</p>	<p>Define Environmental Health risks</p> <p>Identify assessment: FHP Environmental health exposure history Medical model/Review of Systems</p> <p>Stethoscope (cleaning)</p>	<p>Questionnaire</p> <p>I prepare-environmental health history ASTDR found in CDC.gov http://www.atsdr.cdc.gov/asbestos/site-kit/docs/IPrepareCard.pdf</p> <p>Conduct an environmental health history of an adult or fellow student using an interview tool: http://www.atsdr.cdc.gov/csem/cluster/docs/exposure_form.pdf</p>	<p>Attains knowledge of EH concepts, such as implementation of EH strategies.</p> <p>Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers.</p> <p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies</p> <p>Promotes a healthy environment that respects the diverse values, beliefs, cultures, and circumstances of patients, their families and communities.</p>

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		<p>Conduct an environmental health history with the parent/caregiver of a child using interview questions: http://www.atsdr.cdc.gov/csem/pediatric/appendixc.html</p>	
<p>Nutrition (may be a prerequisite to nursing courses in some schools)</p>	<p>Content specific to environmental influences on nutrition: Weather events and food Food/agriculture production Use of pesticides Antibiotics in animals</p>		<p>Attains knowledge of EH concepts, such as implementation of EH strategies.</p> <p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies</p>
<p>Introduction to Professional Nursing/ Leadership/ Trends (beginning level)</p>	<p>ANA Standards of practice-- Standard #16 Environment Legal issues with occupational hazards Social political role of nurse</p>	<p>The 2010 ANA <i>Scope and standards of practice: Nursing</i> now includes Environmental Health Standard 16 for all RNs. http://envirn.org/pg/groups/3755/environmental-health-scope-and-standards-of-practice/</p> <p>Introduction to occupational health is necessary for health care workers http://www.ewg.org/reports/nursesurvey</p> <p>View Toxtown website for hospital http://toxtown.nlm.nih.gov/flash/city/flash.php</p>	<p>Attains knowledge of EH concepts, such as implementation of EH strategies.</p> <p>Participates in strategies to promote healthy communities. (Here consider workplace and professional communities.)</p>

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	<p>Ecological model of health <i>Healthy People 2020</i></p> <p>Health disparities</p>	<p>Ecological model of determinants of health includes environmental health: genetic/biological, health behavior, social and physical environment, health care system http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=12</p> <p>Health disparities exist related to social and physical environment (national and global)--See <i>Unnatural Causes</i> videos www.unnaturalcauses.org http://www.unnaturalcauses.org/media_and_documents/video.php --See <i>Place Matters</i> and <i>Marshall Islands</i> videos</p> <p>If an assignment requires student to use an advocacy piece then use EH examples for some cases, environmental justice</p>	
<p>Pathology</p>	<p>Discuss disease and include potential environmental causation Carcinogens and particular diseases Chemical and prostate cancer; common routes of exposure</p> <p>Environmental illness; multiple chemical</p>		<p>Attains knowledge of environmental health concepts, such as implementation of environmental health strategies.</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p>

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	sensitivity; low dose exposures		
Pharmacology	Distinguish pharmacology and toxicology		<p>Attains knowledge of environmental health concepts, such as implementation of environmental health strategies.</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p>
Research/ Evidence- Based Practice	Evidenced based project based on environmental influences on human health	<p>NINR Research Agenda: (Promoting Health and Preventing Disease; check Areas of Research Emphasis)</p> <p>ANHE Research workgroup</p> <p>EH Practice—then looking at related nursing research(for many areas no nursing research will be found, so there is a gap)</p> <p>Look at evidence</p> <p>Look at controversies and research and debate each side. What is your stand on this based on evidence? Opinion paper. i.e. Climate change</p> <p>How issues are presented by popular media?</p> <p>“An analysis of the evidence”</p>	<p>Check BSN Essentials</p> <p>Attains knowledge of environmental health concepts, such as implementation of environmental health strategies.</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p> <p>Utilizes scientific evidence and is guided by the precautionary principle.</p>

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<p>Adult Health/ Medical-surgical Nursing</p>	<p>Risks discussed with each "disease" e.g. MI include at least one EH risk to any disease;</p> <p>Reinforce EH history done in earlier assessment course;</p> <p>Teaching strategies around reducing exposure;</p> <p>Assess for delirium and strategies to reduce ICU delirium in patients due to the light, sound and other stimuli</p> <p>Include other members of the Health Care team to work appropriately for patient in their discipline</p> <p>Preventive education Avoid— Tobacco smoke Carbon monoxide Air pollution: particulate matter triggers MI, stroke Occupational exposures Housing exposures: remodeling lead, mold Pesticides Neurotoxins and Parkinson's disease</p>	<p>e.g add EH risks to the course objective about assessing risks Address other interdisciplinary team members to address (are there EH members of the team?)</p> <p>Referrals to discharge planning or social service to consider home environment</p> <p>List of vignettes of what others have done searchable by EnviRN</p> <p>See topical, searchable list on EnviRN of what student's have done to prevent or reduce hazard exposure.</p> <p>Add course objective or incorporate into existing objectives</p> <p>Chemical name and common exposures: See EnviRN.org A-Z list</p>	<p>Attains knowledge of EH concepts, such as implementation of EH strategies.</p> <p>Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers.</p> <p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies.</p> <p>Assesses the practice environment for factors such as sound, odor, noise and light that negatively affect health.</p> <p>Reduces environmental health risks in the health care setting (chemical, biological, radiological [and mechanical])</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p> <p>Advocates for the judicious and appropriate use of products used in health care.</p> <p>Communicates environmental risks and exposure reduction strategies to health care consumers, families, colleagues and communities.</p> <p>Collaborates with others to create and implement strategies that promote health environments.</p>
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			Promotes a healthy environment that respects the diverse values, beliefs, cultures, and circumstances of patients, their families and communities.
Gerontological Nursing	See Adult Health content Vulnerable population – Age impacts susceptibility to environmental exposures	List of vignettes of what others have done searchable by EnviRN See topical, searchable list on EnviRN of what student’s have done to prevent or reduce hazard exposure. Add course objective or incorporate into existing objectives Chemical name and common exposures: See EnviRN.org A-Z list	Promotes a practice environment that reduces environmental risks of workers and healthcare consumers. Collaborates with others to create and implement strategies that promote health environments. Communicates EH risks and exposure reduction strategies to health care consumers, families, colleagues and communities.
Child and Family Nursing	Vulnerability of children Home environments Healthy Homes Integrated Pest Management (IPM) Indoor air quality in schools Toxic materials in homes and schools: Toxic toys BPA and exposures to PVC, DEHP	Complete an ANA independent study module on <i>Children’s Environmental Health in Homes and Communities</i> http://nursingworld.org/mods/mod961/cehmfullNEW.htm Complete an ANA independent study module on <i>Children’s Environmental Health in Schools</i>	Collaborates with others to create and implement strategies that promote health environments. Attains knowledge of EH concepts, such as implementation of EH strategies. Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers. Applies knowledge of basic EH concepts to

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	<p>Food exposures Formaldehyde in housing and furniture Common EH health issues for children: Asthma triggers Lead poisoning Pesticides and endocrine disruptors Neurological problems/heavy metal exposure ADHD Fluoride Personal care products Cosmetics for adolescents Sustainable living for families</p> <p>NICU: Avoid PVC plastic and phthalate exposure</p> <p>Anticipatory guidance to parents/guardians for safe living environments: Asthma triggers Preschool lead exposure Avoiding endocrine disruptors: pesticides In food, farms, yards, sports fields Fluoride for dental Personal care products esp. for teens Avoid formaldehyde in furniture</p>	<p>http://nursingworld.org/mods/mod921/cesafull.htm</p> <p>Develop an educational lesson plan using information from one of the following web sites.</p> <p>Reducing Asthma Triggers: Healthy Homes II Asthma Project http://www.kingcounty.gov/healthservices/health/chronic/asthma/past/HH2.aspx</p> <p>Safety issues:</p>	<p>nursing assessment, prevention, and control strategies.</p> <p>Assesses the practice environment for factors such as sound, odor, noise and light that negatively affect health.</p> <p>Reduces environmental health risks in the health care setting (chemical, biological, radiological [and mechanical])</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p> <p>Advocates for the judicious and appropriate use of products used in health care.</p> <p>Communicates environmental risks and exposure reduction strategies to health care consumers, families, colleagues and communities.</p> <p>Promotes a healthy environment that respects the diverse values, beliefs, cultures, and circumstances of patients, their families and communities.</p>
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		<p>Designing and Building Healthy Places: http://www.cdc.gov/healthyplaces National Safety Council http://www.nsc.org/Pages/Home.aspx</p>	
<p>OB/Women's health/ Neonatal Intensive Care Nursing</p>	<p>Fetal Development Fetal Alcohol syndrome Birth defects BPA (Bisphenol A) Fish advisory in pregnancy/ heavy metals Nutrition and food Cord blood studies What was okay is not okay-- DES (and link to EDC) "Skin deep" personal care Products; Baby wash Nursery advocacy; products in the nurseries</p> <p>Do an audit of the products in clinical setting</p> <p>Military exposures and fertility ETS Smoking</p>	<p>Discuss how DES was given in the past and what the results have been--use as segue to the problem of EDCs</p> <p>Environmental Working Group (EWG) video "10 Americans" http://www.youtube.com/watch?v=W5n4HhQr25Q</p> <p>Conduct a prenatal exposure assessment http://envirn.org/pg/file/read/4389/prenatal-exposure-assessment-questionnaire-from-the-environmental-health-education-center</p> <p>NICU audit tool http://noharm.org/lib/downloads/pvc/Alternatives to PVC in NICU.pdf</p> <p>Personal care product assessment (See article Russ, K. (2009). A</p>	<p>Collaborates with others to create and implement strategies that promote health environments.</p> <p>Attains knowledge of EH concepts, such as implementation of EH strategies.</p> <p>Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers.</p> <p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies.</p> <p>Assesses the practice environment for factors such as sound, odor, noise and light that negatively affect health.</p> <p>Reduces environmental health risks in the health care setting (chemical, biological, radiological [and mechanical])</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p>

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	<p>Anticipatory guidance for pre-pregnancy and pregnancy: Avoid-- Tobacco smoke Carbon monoxide with Cooking Chemicals, especially Endocrine disrupters Alcohol—fetal alcohol Syndrome Over the counter drugs Military exposures Agent Orange (dioxin) Gulf War exposures</p>	<p>review of the evidence: Health effects of personal care products, <i>Nursing for women's health</i>, 13(5), 392-401. http://onlinelibrary.wiley.com/doi/10.1111/j.1751-486X.2009.01457.x/pdf</p>	<p>Advocates for the judicious and appropriate use of products used in health care.</p> <p>Communicates environmental risks and exposure reduction strategies to health care consumers, families, colleagues and communities.</p> <p>Promotes a healthy environment that respects the diverse values, beliefs, cultures, and circumstances of patients, their families and communities.</p>
<p>Psychiatric/Behavioral/ Mental Health Nursing</p>	<p>Autism/ADHD</p> <p>Polypharmacy/toxic chemicals interaction?-- what do we know? Chemical triggers for symptoms.</p> <p>Toxic environments in community (e.g. impact of noise upon schizophrenic; PTSD; delirium; Autism; ADHD)</p> <p>Medical co morbidities? fit here?</p> <p>Group home protocols-- pesticides, at home exposures ETS</p>	<p>Look at emerging evidence related to causative agents (e.g. dyes for ADHD)</p> <p>PTSD and impact of noise, light, sounds</p> <p>For environmental assessment of group home or shelter, use Environmental Health and Safety Assessment tool: http://envirn.org/pg/file/read/4387/home-environmental-health-and-safety-assessment-tool</p> <p>Identify one chemical, look it up on the www.toxnet.nlm.nih.gov website and identify how this may</p>	<p>Collaborates with others to create and implement strategies that promote health environments.</p> <p>Attains knowledge of EH concepts, such as implementation of EH strategies. Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers.</p> <p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies.</p> <p>Assesses the practice environment for factors such as sound, odor, noise and light that negatively affect health.</p> <p>Reduces environmental health risks in the health care setting (chemical, biological,</p>

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	<p>Alzheimer's & cognitive Deficits and EH</p> <p>ADHD: Avoid foods with artificial coloring (new research)</p> <p>Neurotoxins and organic brain syndrome</p> <p>Mood changes with chemical exposures</p>	<p>pose an added burden to a person with mental illness.</p> <p>Self learning environmental links to ADHD http://www.sph.emory.edu/PEHSU/html/health/adhd.htm</p>	<p>radiological [and mechanical])</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p> <p>Advocates for the judicious and appropriate use of products used in health care.</p> <p>Communicates environmental risks and exposure reduction strategies to health care consumers, families, colleagues and communities.</p> <p>Promotes a healthy environment that respects the diverse values, beliefs, cultures, and circumstances of patients, their families and communities.</p>
<p>Community/Public Health Nursing</p>	<p>Home assessments for environmental hazards</p> <p>Integrated pest Management (IPM)</p> <p>Occupational Health</p> <p>Healthy Schools</p> <p>Sustainable air, water, land</p> <p>Climate change and health</p> <p>Disposal of prescription medications</p>	<p>Assess household products for ingredients that can have human health effects after viewing the U.S. Department of Health and Human Services Household Products data base. http://householdproducts.nlm.nih.gov/</p> <p>Integrated Pest Management http://www.epa.gov/pesticides/factsheets/ipm.htm</p> <p>Integrated pest management in schools http://www.epa.gov/opp00001/ipm/</p>	<p>Participates in strategies to promote healthy communities.</p> <p>Assesses the practice environment for factors such as sound, odor, noise and light that negatively affect health.</p> <p>Incorporates environmental risk factors across the lifespan when assessing individuals, families, and/or communities.</p> <p>Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers.</p>

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	<p>Public health emergencies Public health policy: Advocacy campaigns Govt. testimony</p> <p>Social Justice Environmental Justice</p>	<p>Healthy Schools http://www.epa.gov/iaq/schools/index.html</p> <p>Anticipate the health effects of climate change on a local community. http://www.noharm.org/global/issues/climate/health.php</p> <p>Explore an environmental health policy issue and develop a position.</p> <p>Check the internet to see if your local or state health department has a division of environmental health; describe what it does and what professionals are employed.</p> <p>Conduct a windshield survey of environmental hazards in a community after viewing The National Library of Medicine's <i>ToxTown</i> http://toxtown.nlm.nih.gov/</p> <p>Complete the Agency for Toxic Substances and Disease Registry's (ATSDR) on-line module, <i>A primer on health risk communication</i>. (Especially select the section entitled "Issues and Principles.")</p>	<p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies.</p> <p>Collaborates with others to create and implement strategies that promote health environments.</p> <p>Communicates EH risks and exposure reduction strategies to health care consumers, families, colleagues and communities.</p> <p>Promotes one's right to know about potentially harmful products, chemicals, pollutants and hazards to which people may be exposed.</p> <p>Uses scientific evidence and is guided by the precautionary principle.</p> <p>Advocates for healthy environments that include issues associated with air, water, soil, food/agriculture, the built environment, and chemicals/products.</p> <p>Advocates for environmental justice, including commitment to the health of vulnerable populations and the elimination of health disparities (AACN 2008, Baccalaureate Competencies, page 25, line 12).</p>
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		<p>http://www.atsdr.cdc.gov/HEC/primer.html</p> <p>Read the book or review the film about environmental injustice: book, <i>A Civil Action</i>, (1995) by Harr, J.; film by same title (1998). Then reflect on the injustices and discuss implications for population’s health status.</p> <p>Obtain information from Centers for Disease Control and Prevention (CDC). (2009). <i>Fourth national report on human exposure to environmental chemicals</i>. Atlanta, GA.: Author. Retrieve from http://www.cdc.gov/exposurereport/</p>	<p>Incorporate environmental health information, including national bio-monitoring of human exposure to environmental chemicals, into assessment of communities and populations.</p>
<p>Leadership/ Trends/ Advocacy/Policy (senior level)</p>	<p>Resources management for budget Occupational hazards Regulatory issues-- Sustainable practices Impact of leader across team of costs</p> <p>Build on BSN <i>Essentials</i> Risk Reduction Impact of economy on environmentally conscious decisions; Environmental scan— inadequate workforce >increased errors;</p>	<p>Consider an assignment where the student needs to look at what makes a good work environment and what makes a good leader: Authentic Leaders Creating, Healthy Work Environments for Nursing Practice, Nursing leaders who have made changes</p> <p>AACN Journal article Authentic Leaders Creating Healthy Work Environments for Nursing Practice. (available online@no cost)</p>	<p>Collaborates with others to create and implement strategies that promote health environments.</p> <p>Attains knowledge of EH concepts, such as implementation of EH strategies.</p> <p>Promotes a practice environment that reduces environmental health risks of workers and healthcare consumers.</p> <p>Applies knowledge of basic EH concepts to nursing assessment, prevention, and control strategies.</p> <p>Assesses the practice environment for</p>

	<p>Promote sustainable hospital environments; Safe hospitals—assess workplace exposures and ways to reduce and prevent exposures; Regulatory environment Team buy in ANA Standards of Practice</p> <p>Environmental Activism- Tracing our history</p> <p>Pharmaceutical waste issues</p>	<p>Nursing leaders who have influenced environmental health, safety. Leader Denise Choiniere http://envirn.org/pg/groups/13/working-the-green-shift/</p> <p>Case studies of RNs who have seen problems and worked to change www.luminaryproject.org</p> <p>Evaluate organizational policy related to greening of hospitals.</p> <p>Pharmaceutical waste and budget implications http://noharm.org/us_canada/issues/pharmaceuticals/#preventing</p>	<p>factors such as sound, odor, noise and light that negatively affect health.</p> <p>Reduces environmental health risks in the health care setting (chemical, biological, radiological [and mechanical])</p> <p>Utilizes scientific evidence to determine if a product or treatment is a potential environmental threat.</p> <p>Advocates for the judicious and appropriate use of products used in health care.</p> <p>Communicates environmental risks and exposure reduction strategies to health care consumers, families, colleagues and communities.</p> <p>Promotes a healthy environment that respects the diverse values, beliefs, cultures, and circumstances of patients, their families and communities.</p>
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This content would be placed on envirn with all of the supporting documentation.

Wiki Chadrué will start writing a blog about this and will help bring nursing faculty to the site/

Thoughts:

- **Topical, searchable list on EnviRN of what student’s have done.**
- **Organize by competency and have examples, which are easily transferable to courses.**
- **Cross reference with Essentials**
- **How do we identify chemicals and common exposures for faculty to easily access.**

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