

**INTENTIONAL LEARNING EXPERIENCES & ASSESSMENTS FOR GEN ED**  
**Biology, Health & Wellness Faculty Meeting**

1. Communicate effectively using listening, speaking, reading and writing skills.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Use of insight boxes in textbook	Have groups (3) summarize & explain to the rest of the class the link between story & subject matter
Use of videos at book website	Reflection on discussion board for class
Current event related to topic is presented	Instructor rates presentation (1-10) for understanding and English usage
Warm up exercises	Grade for answering questions; evaluation of answers in class
Case studies	Students research a controversial topic, write paper and present to class
Literature review of topic	Locate/read summarize articles from discipline literature
Field trip reports	Present observations to class
Teaching topics to each other in group	Answer set of questions as a study guide
Lecture and demonstration of life saving skills	Students demonstrate skills learned; take written exams
Watching film such as "An Inconvenient truth"	Students write or present summary for part of overall grade
Evaluate health related websites	Students write/present review of the websites
Daily discussion in class	Students receive participation points, Topics are covered by exam
Service learning project	Written assignment turned in , oral Presentation given in class
Group presentation related to human diseases	Students receive grade for their presentation

2. Use quantitative analytical skills to evaluate and process numerical data.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Quantitative & data analysis	Students present project/ write paper
Food label assignment	Students compare different labels, turn
Graphing data/ Genetic analysis	Students create graphs, genetic crosses
Microbial growth curve	Calculation and graphing
Microbial counting	Students use serial dilutions to do bacterial counts
Student record all the food they consume for 7 days and enter data into database to compare to standard value	Students produce scientific paper comparing their diet to the standard values gathered from database
Dietary analysis	Students calculate BMI, BMR, nutrient density and their dietary intake of fats, proteins and carbohydrates
Study questions from textbook/graphs/ tables	Student produce written assignment
Collection of field data	Student produce written assignment/ presentation
Calculation of heart rates, blood pressure, body fat, body mass index	Students complete lab assignment
Laboratory math assignments	Students are tested
Presenting and analyzing annual death rates in USA and their causes	Students conduct group activity reviewing numbers of deaths and causes
Teaching the metric system	Students use the microscope to measure specimens with metric system
Measurement exercises (various) in lab	Students are tested

3. Solve problems using critical and creative thinking and scientific reasoning.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Identify normal body functions and compare to disease state	Students are tested
Identify normal body flora and be able to describe what occurs to it when broad based antibiotics are given	Students are tested
Use of open ended questions in class presentation	Students participate in class Discussions and follow-up discussions
Use of critical thinking questions at the end of chapter	Students provide written and oral responses (discussion board)
Laboratory reports	Students analyze and interpret their data
Trouble shooting HIV testing at community clinic	Students learn the importance of background controls, positive and negative controls for HIV testing
Position paper on topic related to class	Students research position, evaluate data from each side, write paper or present to class
Instruct students about scientific method	Student review lab experiment design and formulate hypothesis
Applying the scientific method	Students write up their own lab problem / solution step
Stage accident scenario where student evaluate condition and decide on appropriate treatment	Student states condition and treatment for a grade
Select and design personalized strength program for cardio and flexibility	Student will complete lab and demonstrate improvement in post assessment tests
Student writes essay about climate change	Student receives grade for assignment
Student assignment on finding causes of illness due to diet and environmental factors	Student receives grade for assignment


4. Formulate strategies to locate, evaluate, and apply information.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Student writes report on clinical condition	Report is graded
Biology lab assignments	Student writes lab report on data gathered during experiment
Course position paper	Students research controversial area of biology and write/present info to class
Scavenger hunt activity	Student completes scavenger hunt form
Finding and summarizing scientific information	Student completes written assignment that requires library usage
Research projects are assigned to students	Students do a class presentation of results
Construction of double mutant <i>Drosophila melanogaster</i>	Students formulate and discuss strategies to complete term project
Nutritional message boards	Students summarize and analyze opinions

5. Demonstrate knowledge of diverse cultures, including global and historical perspectives.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Student review history of science (discoveries and scientist)	Students write report
Students complete assignment on how discoveries and technologies have changed society	Graded learning worksheet
Students bring food from different cultures and explain how it is grown	Students receive grade based upon clarity of presentation and peer feedback
Students are presented with gender/ social specific diseases	Students complete lab and exam
Activity on nutritional patterns of various cultures and how they affect mortality	Students tested
Geographical differences in resource Utilization	Students present written/oral assignment for comparison
Relate diseases to vectors and mass migrations of human populations	Students will engage in class discussion and written reports
Discussion of epidemics	Students engage in discussions and are tested

6. Create strategies that can be used to fulfill personal, civic and social responsibilities.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Apply course material in community agencies	Service learning projects
Service learning block on "Rejuvelake"	Students learn by doing
Physical and nutrition self-assessments	Students complete questionnaire
Health risk assessments	Students complete online and written instruments
Service learning project in nursing home/hospital for anatomy students	Students write report on project
Discussion of personal hygiene, communicable diseases, antibiotic resistance	Students are tested on material
Discuss ethical issues associated with food production such as pesticide residues, animal based products	Students complete short answer essay and other assignments/tests

7. Demonstrate knowledge of ethical thinking and its application to issues in society.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Implement impromptu essay assignments (who am I and why am I here?) reflection, critical thinking, stimulating moral perception	Students receive extra credit points upon completing assignment
Discussion of scientific ethical dilemmas such as green house gases, genetic engineering, stem cells	Students are graded based upon participation
Cluster or group syllabus activity, reduce anxiety –breakout groups	Students participate in facilitated discussion groups
Student compose journal to develop understanding of ones moral perception	Student journal is reviewed and grade assigned
Involvement in community sites to apply and learn course material	Student participates in service learning project
Studies of conservation and the Environment	Student have discussion and write about activity
Discussion of proper use of medicines and medical treatments in patients	Student participate in class discussion

8. Use computer and emerging technologies effectively.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Design website to present course content or field experience	Students receive grade based upon the appeal, accuracy, etc of the website
Use multimedia such as CD-ROMS or ANGEL to present course material	Student participate in web-enhanced courses and complete activities using multimedia tools
Use of web research projects, computer programs (such as CYBER ED)	Students are tested
Educational games in various classes such as BSC 2086, MCB 2010, HUN 1201, HLP 1081	Students write report on activity and evaluate data
Use of technology to prepare presentation	Students are graded on the activity
Using WEB CT, WebPages for assignments or discussions	Students evaluate data from printout and also write report on activity

9. Demonstrate an appreciation for aesthetics and creative activities.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Reflective expression after field experience (writing, art, verse, music)	Students graded based upon how well their reflection connects science to aesthetics and also to the degree of clear communication (outcome #1)
Point out the beauty of nature	Students prepare diagrams in lecture or lab about specimens collected or studied in class
Use various bacteria to make and decorate a holiday tree on agar plate	Isolation techniques and bacterial characteristics are described in report
Students presented with emergency scenarios	Students graded based upon how creatively they respond to scenario
Site visit to natural area	Students prepare written summary or oral presentation to class
Menu planning and aesthetic presentation of different foods	Students graded on assignment

10. Describe how natural systems function and recognize the impact of humans on the environment.

<b>Intentional Learning Experiences</b>	<b>Assessment Strategies</b>
Students go to environment center to learn how natural systems operate	Students prepare lab report on field experience
Discuss case studies on microbial impact on the environment and humans	Students produce writing assignment and are tested
Field trips (guided) to local preserves/parks	Students participate in service learning experiences
Discussion of current events dealing with natural disasters and ecological changes	Students write reports
Discuss college-wide policies and procedures for green institutions	Students assess compliance via national standards for green institution
Discussion on the impact of pesticides, chemicals, anabolic steroids on human health and populations	Students discuss issues in groups and prepare position paper
Discussion of how chemicals affect water and food supply	Students write report and are tested on topic