

Course Home - Syllabus

Natural Science: Competency 1

Purpose

This syllabus provides course information, which includes materials required for the course, the course description, and student learning outcomes (LOs) to help you navigate the course and complete requirements.

Policies

Technology Requirements

This is an online course and the following technological resources are required:

- Computer/Internet access and connection: high-speed preferred (not dial up)
- Speakers so you can hear audio enhanced assignments throughout the semester
- Headset/Microphone
- Webcam
- Microsoft Word, Excel, and PowerPoint

This course may also require the following:

As a student enrolled at Texas A&M University-Commerce, you have access to an email account via myLeo - all my emails sent from eCollege (and all other university emails) will go to this account, so please be sure to check it regularly. Conversely, you are to email me via the eCollege email system or your myLeo email as our spam filters will catch Yahoo, Hotmail, etc.

Our campus is optimized to work in a Microsoft Windows environment. This means our courses work best if you are using a Windows operating system (XP or newer) and a recent version of Microsoft Internet Explorer (6.0, 7.0, or 8.0).

Your courses will also work with Macintosh OS X along with a recent version of Safari 2.0 or better. Along with Internet Explorer and Safari, eCollege also supports the Firefox browser (3.0) on both Windows and Mac operating systems.

It is strongly recommended that you perform a "Browser Test" prior to the start of your course. To launch a browser test, login in to eCollege, click on the 'myCourses' tab, and then select the "Browser Test" link under Support Services.

Access and Navigation

This course will be facilitated using eCollege, the Learning Management System used by Texas A&M University-Commerce. To get started with the course, go to: <https://leo.tamu-commerce.edu/login.aspx>.

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamucommerce.edu.

eCollege Student Technical Support

Texas A&M University-Commerce provides students technical support in the use of eCollege. The student help desk may be reached by the following means 24 hours a day, seven days a week.

- Chat Support: Click on 'Live Support' on the tool bar within your course to chat with an eCollege Representative.
- Phone: 1-866-656-5511 (Toll Free) to speak with eCollege Technical Support Representative.
- Email: helpdesk@online.tamuc.org to initiate a support request with eCollege Technical Support Representative.
- Help: Click on the 'Help' button on the toolbar for information regarding working with eCollege (i.e. How to submit to Dropbox, How to post to discussions, etc...)

Course Concerns

If you have questions pertaining to the content of this course (e.g., questions about an exam, about course due dates, etc.), please contact your instructor, Dr. Haydn "Chip" Fox, via email using the Email tab at the top of the window.

Other Questions/Concerns

Contact the appropriate TAMU-C department related to your questions/concerns. If you are unable to reach the appropriate department with questions regarding your course enrollment, billing, advising, or financial aid, please call 903-886-5511 between the hours of 8:00 a.m.- 5:00 p.m., Monday through Friday.)

Communication and Support

Email is the best way to communicate with me because I am always have it open on my office computer. Even when I'm not in the office, I check it many times each day.

Course and University Procedures/Policies

Academic Honesty Policy

Texas A&M University-Commerce does not tolerate plagiarism and other forms of academic dishonesty. Conduct that violates generally accepted standards of academic honesty is defined as academic dishonesty. "Academic dishonesty" includes, but is not limited to, plagiarism (the appropriation or stealing of the ideas or words of another and passing them off as one's own), cheating on exams or other course assignments, collusion (the unauthorized collaboration with others in preparing course assignments), and abuse (destruction, defacing, or removal) of resource material. Violation of these academic standards may result in removal or failure. Please see the TAMU Catalog.

Dropping the Class

If you need to adjust your schedule by dropping this course, please contact your Academic Coach. Please be aware that dropping your course may impact your financial aid, veterans and military benefits, three peat, 45-hour, and 30-hour rules. It is the student's responsibility to drop the course. If you fail to officially drop the class, a failing grade shall be assigned.

Incompletes

If you receive a grade of "I" or Incomplete you have one full term to complete the items that remain incomplete. If you have not submitted the necessary assignments by the end of the next full term your grade automatically converts to an "F."

Student Withdrawal

A student wishing to withdraw from all courses before the end of a term for which he/she is registered must clear his or her record by filing an application for voluntary withdrawal. Please contact your Academic Coach.

This action must be taken by the date stated in the Academic Calendar as the last day to drop a class or withdraw. Any student who withdraws from the university is subject to the conditions outlined in the section regarding Scholastic Probation or Suspension in the university catalog. It is the student's responsibility to withdraw from classes if he or she does not plan to attend during the semester in

he/she has enrolled. A student has one year from the first day of a semester to appeal a withdrawal refund. Courses withdrawn are counted as attempted hours and count towards the three-peat, 45-hour and 30-hour rules and financial aid and veterans and military benefits.

Instructor Withdrawal

Your instructor of record reserves the right to withdraw a student from his or her course based on inadequate access to and progress in the online course materials.

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce
 Gee Library 132
 Phone (903) 886-5150 or (903) 886-5835
 Fax (903) 468-8148
 StudentDisabilityServices@tamuc.edu
[Student Disability Resources & Services](#)

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See [‘Code of Student Conduct’](#) from Student Guide Handbook)

Course Home

Course Objective: The student will understand how sciences can/are applied to daily life experiences. (Nature & Applicability of Science to Everyday Life)

The world and everything in it is built upon science. Whether it is medicine, technology, art, or the stars, there is some form and some amount of science involved. It could be physics, chemistry, biology, earth sciences, and/or astronomy. This course introduces you to the fascinating world of science. Explore how science is applied to your daily life through the integration of the different science disciplines. Distinguish what the scientific method is and other various methods and tools of science. Discover how scientific discoveries, research, and technology are connected and the implications on ethical and legal practices. Then, apply it all together to your daily life experiences. This course gives you the foundational knowledge to explore each discipline of science further and discover how to apply them to your daily life.

Content	Description	Notes
Syllabus	For the first learning outcome, Science to Daily Life Experiences, read a chapter, practice identifying science discipline examples and create a chart, and write a 2-page paper on science discipline examples. For the second learning outcome, Science Disciplines Integration, read chapter excerpts, practice interactive exercises, read chapter excerpts, practice interactive exercises, read chapter excerpts, practice interactive exercises, and create a 4-page	You have maximum responsibility for your learning and involvement in the course. It is important that you review the syllabus and keep up with the course materials and deadlines.

	<p>presentation on integration of science disciplines.</p> <p>For the third learning outcome, The Scientific Method, watch a video, read a chapter, practice breaking down the scientific method, discuss the scientific method given a scenario, and write a 2-page summary on scientific method use in a case study.</p> <p>For the fourth learning outcome, Science & Technology, read a chapter, identify science discipline and technology in use, read an excerpt on ethics, discuss science, technology, and ethics given a scenario, and create a presentation.</p> <p>For the fifth learning outcome, Methods & Tools of Science, read a chapter, watch a video, read another chapter, practice identifying methods and tools used, answer questions, and write a 2-page summary.</p> <p>For the sixth learning outcome, Size & Scale, read a chapter, identify statistical study types, watch a video, read another chapter, watch two more videos, answer questions, read an excerpt, watch another video, answer more questions, and write a 2-page summary.</p>	
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Pretest

The Pretest for this Natural Science course assesses your knowledge of Science to Daily Life Experiences, Science Disciplines Integration, The Scientific Method, Science & Technology, Methods & Tools of Science, and Size & Scale.

The purpose of the pretest is to provide a baseline understanding of your knowledge in this competency. The pretest is required for the course. Passing grades for all competencies and assignments for this course are a score of 80 points or higher.

Passing grades for all competencies and assignments for this course are a score of 80 points or higher.

Content	Description	Time	Value	Notes
Pretest	Measures your competency of learning outcomes through essay, short answer, and multiple choice questions.	120 minutes	100 points	

Learning Outcome 1: Science to Daily Life Experiences

Learning Outcome: Application of Science to Daily Life Experiences

What do a prescription you just picked up at the pharmacy, the framed art at the office, and the direction in which your TV satellite is pointing have in common? Some form and amount of science is involved in all of them. In this learning outcome, you are introduced to a brief history of science, the scientific method, how science is incorporated in your daily life, and the science disciplines: physics, chemistry, biology, earth sciences, and astronomy. A basic foundation of knowledge in these areas enables you to further explore each further and apply them to your daily life experiences.

Content	Description	Notes
Reading 1.1	Hewitt, P. G., Lyons, S., Suchocki, J., & Yeh, J. (2013). <i>Conceptual integrated science</i> (2nd ed., pp. 1-11). Boston, MA: Addison-Wesley.	Read this chapter for an introduction to what science is about. Explore a brief history, learn the scientific method, and examine science in art, religion, and technology. Discover the natural science disciplines and the integration of sciences. This reading provides you with the essential knowledge you need to appreciate science and to explore these topics further.
Exercise 1.1	Equations as Guides to Thinking about Daily Life & Scientific Method Chart	Complete this exercise to reinforce the concept of the scientific method being used in your daily life. You will create a chart illustrating the scientific method steps used in two different scenarios.
Assignment 1.1	Science Disciplines in Your Daily Life	Science is everywhere. Science is in art, religion, and technology. The practice of science uses the scientific method. Complete this assignment requiring you to apply a basic understanding of how science is incorporated in your daily life experiences.

Learning Outcome 2: Science Disciplines Integration

Learning Outcome: Integration of the Science Disciplines

You were briefly introduced to the different science disciplines: physics, chemistry, biology, earth sciences, and astronomy. Now you might be wondering, just what is the connection between them? Physics is the study of such concepts as motion, force, energy, matter, heat, sound, light, the components of atoms, and their interactions. Without these, there would be no existence. Physics is the basis for all other science disciplines. In this learning outcome, you explore some of the key concepts that can be applied across the scientific disciplines—many of them starting with physics. You discover that physics helps you to understand how things work and behave in the world around you. You learn that chemistry builds on physics; earth sciences and astronomy apply physical and chemical principles to the planets and beyond; and biology brings concepts from physics and chemistry to the study of life. A basic understanding of how the science disciplines are integrated enables you to analyze data and solve problems across the science disciplines in your daily life.

Content	Description	Notes
Reading 2.1	Hewitt, P. G., Lyons, S., Suchocki, J., & Yeh, J. (2013). <i>Conceptual integrated science</i> (2nd ed., pp. 22-23, 30-31, 45-52, 54-59, 96, 126-128, 137-138, 148, 179). Boston, MA: Addison-Wesley.	In these reading excerpts, you study concepts of physics as well as examine the various aspects of mass and the forces of friction. This includes studying Newton's three laws of motion and the law of universal gravitation; learning to distinguish between the three laws of thermodynamics and convection of fluids and gases; analyzing negative and positive electric charges; and examining amplitude, wavelength, frequency, and period. Learning about these concepts in the science discipline of physics enables you to understand how the world around you works and behaves, the connections between the science disciplines, and how it is the basis for technology.
Exercise 2.1	Physics Concepts	Complete these interactive exercises to reinforce the concepts of physics including Newton's laws, electrical force and charge, and vibrations and waves. Each exercise helps you understand how things work and behave around you. Each exercise supports a concept you can apply to any of the science disciplines; think about similar activities in your life. Watch the animations then answer the questions.
Reading 2.2	Hewitt, P. G., Lyons, S., Suchocki, J., & Yeh, J. (2013). <i>Conceptual integrated science</i> (2nd ed., pp. 215-218, 262-263). Boston, MA: Addison-Wesley.	In these two reading excerpts, you study aspects of chemistry. First, you examine the connection of physics and chemistry in a synopsis of atoms both ancient and empty. Then, you explore the elements of chemistry and the relationship between mass and energy. Finally, you investigate the connection between physics, chemistry, and astronomy in a synopsis of nuclear fusion. Learning about these concepts and scenarios in the science discipline of chemistry enables you to better understand how the world

		around you works and behaves, the connections between the science disciplines, and how science is the basis for technology.
Exercise 2.2	Evidence of Atoms	Complete this interactive exercise to reinforce the concept of atoms in motion in the science discipline of chemistry. Just because you can't see them doesn't mean they aren't moving.
Reading 2.3	Hewitt, P. G., Lyons, S., Suchocki, J., & Yeh, J. (2013). <i>Conceptual integrated science</i> (2nd ed., pp. 550, 609). Boston, MA: Addison-Wesley.	In these reading excerpts, you study biology, including analyzing the various components of homeostasis and exploring the different levels of ecological study with organisms and their environments. Learning about these concepts in the science discipline of biology enables you to better understand how the world around you works and behaves, the connections between the science disciplines, and how science is the basis for technology.
Exercise 2.3	Adaptations	Complete this interactive exercise to reinforce the concept of organisms and their environment in the science discipline of biology. Identify the adaptations organisms go through in two different environments. Think about plants and animals in your own life and the changes they go through within a 24-hour period. How many science disciplines are integrated in the changes? Watch the animations and then answer the questions.
Assignment 2.1	Integration of the Science Disciplines	In this learning outcome, you built a basic understanding of physics, chemistry, and biology. You also have seen how these three science disciplines are interrelated. Complete this assignment requiring you to apply a basic understanding of how the science disciplines are integrated in the world around you.

Learning Outcome 3: The Scientific Method

Learning Outcome: The Scientific Method

The scientific method was introduced in Learning Outcome 1 along with the six steps: observe, question, hypothesize, predict, test predictions, and draw conclusions. In this outcome, you analyze an example of how the scientific method is used by investigating a question from the biology discipline: Can science cure the common cold? In this scenario, you explore the process of science, hypothesis testing (experiments), statistics, and types of statistical studies. Then, you determine the factors used to evaluate scientific information. Lastly, you draw a conclusion based on all information and evaluation.

Content	Description	Notes
Multimedia 3.1	Introducing the Scientific Method	Search the Internet or your school library for a video, using keywords "Scientific Method Monty Python" for an example of the scientific method.
Reading 3.1	Belk, C., & Maier, V. B. (2013). <i>Biology: Science for life</i> (4th ed., pp. 2-28). Boston, MA: Addison-Wesley.	Read this chapter from the science discipline of biology. This reading introduces you to the scientific method in more detail using the scenario "Can Science Cure the Common Cold?" Examine the various aspects of mass and the forces of friction. Explore the process of science, hypothesis testing (experiments), and statistics. Determine the factors in evaluating scientific information. Then, draw a conclusion based on all information and evaluation. Learning about these concepts in the science discipline of biology enables you to better understand how the scientific method is used and the connections between the science disciplines.
Exercise 3.1	Breaking Down the Scientific Method	Complete this exercise to reinforce your understanding of the steps and application of the scientific method in use. Read the article "Green Gasoline Comes Closer to Fueling Your Car." Analyze the scientific method steps to what was implemented. Identify the science disciplines involved.

Discussion 3.1	What Is the Scientific Method (and Can Cats Swim)?	Participate in this discussion topic in order to better your understanding of how the scientific method can be used given the scenario. Search your school library or the Internet using keywords "scientific method examples." This helps you to identify how the scientific method can be used as well as the steps taken when presenting a case or argument.
Assignment 3.1	The Scientific Method in Use	The scientific method provides a systematic process to explore a problem. The readings and exercises in this learning outcome have provided many illustrations of how the scientific method can be used in analyzing a situation. Complete this assignment requiring you to apply a basic understanding of how the scientific method is applied when analyzing a given situation, the steps taken, identification of any gaps in the research, existing trial and error steps, and evaluation of the conclusion.

Learning Outcome 4: Science & Technology

Learning Outcome: Science and Technology's Impact Society

When you think about the different disciplines of science, you may wonder how technology fits in. Consider your usage of technology in your daily life. You wake up to your smart phone alarm, head to the bathroom to brush your teeth with an electric toothbrush, rush down to the kitchen for an automatically brewed cup of coffee, hop into the car, program your GPS to your first appointment, give a presentation over a web conference, place the sales order you just got, order lunch from an app on your smart phone, pick up your lunch, head home to work at the computer until 6 pm, take a run while listening to the iTunes songs you downloaded last night, shower, and finally sit down to watch a recorded movie on that big flat-screen TV. From the hardware of the material—how it is made—to the way the technology operates, to how we physically use it, to how it makes us feel, and to how we relate to each other, technology crosses all science disciplines, solving problems and creating new ones. In this learning outcome, you recognize how scientific discoveries are connected to technological innovations. You also discover how search engines, databases, and other digital tools are used effectively to locate information. And you examine how scientific research and technology have had an impact on ethical and legal practices.

Content	Description	Notes
Reading 4.1	Quinn, M. J. (2013). <i>Ethics for the information age</i> (5th ed., pp. 2-41). Boston, MA: Addison-	We live in an information age of computing and communication

	Wesley.	devices that have made information easier to collect, transmit, store, and retrieve. Read this chapter for an overview of scientific discoveries that connect to technological innovations in computing, networking, and information storage and retrieval. Identify some of the issues that are also derived from the creation of technology.
Exercise 4.1	Studying Evolution in Action	Complete this exercise to better understand how two sciences are integrated in the research of "evolution." Read this article to better understand how science and technology were combined in a research project. This exercise helps you to connect the influence of technology in science.
Reading 4.2	<p>Quinn, M. J. (2013). <i>Ethics for the information age</i> (5th ed., pp. 51-57, 403-436). Boston, MA: Addison-Wesley.</p> <p>Graziano, A. M., & Raulin, M. L. (2013). <i>Research methods: A process of inquiry</i> (8th ed., p. 25). Boston, MA: Pearson.</p>	Read the excerpts for an overview of ethics in the information age. The readings cover basic terms and describe what ethics is—one from an information age perspective and the other from a scientific research view. The first reading addresses overall ethics, professional ethics, codes of ethics, and whistleblowing, and provides case studies to reinforce how to handle information technology related moral problems. The second reading gives a brief overview of the role of ethics in research.
Discussion 4.1	Science, Technology, and Ethics	Participate in this discussion topic in order to better your understanding of the relationship between science, technology, and ethics. Search (using keywords "sound and fury") for sources on a documentary about a family's journey from deafness to hearing.
Assignment 4.1	Sciences, Technology, and Impact to Society	Science and technology can be focused on one thing or cross several aspects of life. They can also have a positive or negative impact on society. Complete

		this assignment, which requires you to apply a basic understanding of how science and technology are integrated into the research process, solutions, and what ethical or legal considerations exist. Read an article and present a case as to why you would feel this project should receive more funding.
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Learning Outcome 5: Methods & Tools of Science

Learning Outcome: Methods & Tools of Science

There is no shortage of data in this world. Everywhere you look, you are driven by some kind of data. Open a newspaper and you see data about sports, real estate, stocks, and politics. Listen to commercials on the radio and you hear data from a poll or survey being used to sell you a product or service. How do you make sense of all the data? In this learning outcome, you build a foundation of concepts to analyze data through statistical procedures (or tools). You identify data types and levels of measurements. You determine how to handle statistical errors and explore the uses of percentages and you decipher the value of using index numbers. In using the methods and tools of science, you are able to evaluate the validity of data presented to you, describe the results of a study, and interpret the meaning of those results.

Content	Description	Notes
Reading 5.1	Bennett, J., Briggs, W. L., & Triola, M. F. (2014). <i>Statistical reasoning for everyday life</i> (4th ed., pp. 45-69). Boston, MA: Pearson.	Read this chapter for an overview of methods and tools of science. You identify data types and levels of measurements, determine how to handle errors, explore the uses of percentages, and analyze the value of using index numbers. A basic understanding of these enables you to use various methods and tools of science and to evaluate the validity of data presented to you in your daily life.
Multimedia 5.1	Statistics Is About People, Even If You Can't See the Tears	Watch this video for a perspective on what statistics is about. This video helps you to better understand some of the attributes behind methods and tools of science.
Reading 5.2	Graziano, A. M., & Raulin, M. L. (2013). <i>Research methods: A process of inquiry</i> (8th ed., pp. 97-120). Boston, MA: Pearson.	Read this chapter for an overview of methods and tools of science. This reading provides you with additional terminology and a foundation of

		<p>concepts to analyze data through statistical procedures (or tools). In using the tools described in the reading, you learn to describe the results of a study and the meaning of those results. A basic understanding of these tools enables you to apply the concepts to organize and describe data as well as to analyze a study with informed statistical decision making.</p>
Exercise 5.1	Statistical Methods and Tools	<p>Complete this exercise to reinforce some of the concepts of methods and tools of science such as averages, means, median, and null hypothesis. Watch the three videos then research three different studies referencing each concept. After analyzing the data, do you agree with the conclusion? What questions rise out of evaluating the data? Is the data correct? Is it valid?</p>
Exercise 5.2	Measurements & Analysis	<p>Complete this exercise to reinforce the methods and tools of science concepts from the readings. Applying the concepts enables you to critically think through, from a statistical perspective, studies presented to you in your daily life.</p>
Assignment 5.1	Putting It into Practice	<p>Data show that individual differences exist everywhere. Without understanding the data, it would be hard to visualize the meaning. Completing this assignment requires you to apply your understanding of how methods and tools of science are used to organize and understand data. Choose one of three categories of data from a newspaper or other source and then analyze the data, answer questions, and write a summary of your findings.</p>

Learning Outcome 6: Size and Scale

Learning Outcome: Size & Scale: Putting Things in Perspective

How do you believe the data behind a survey? How do you believe the data behind a product used by most of the population? How many people were used in the survey? What was the sampling? How can you make an informed decision without knowing these facts that are supposed to truthfully support the argument, the science, or the hypothesis being presented? In this learning outcome, you define statistics and the importance of statistical sampling in research. You investigate different statistical studies; explore what type of study is best for a particular situation; identify the sampling characteristics behind methods and tools of science and the statistical attributes around what is determined as normal; analyze the meaning of data for various size and sample distributions; and explore the concepts on sampling distributions, estimating population means, and estimating population proportions. This knowledge gives you the foundation to put things in perspective by better analyzing data size and sampling behind various studies and inquiring about more facts for the truth.

Content	Description	Notes
Reading 6.1	Bennett, J., Briggs, W. L., & Triola, M. F. (2014). <i>Statistical reasoning for everyday life</i> (4th ed., pp. 1-41). Boston, MA: Pearson.	Read this chapter to better understand size and scale. This reading defines statistics, the importance of statistical sampling in your research, and types of statistical studies. You also learn to evaluate statistical studies. This base knowledge enables you to better determine the validity of arguments from data presented in your daily life.
Exercise 6.1	Types of Statistical Studies	Complete this interactive exercise to reinforce the concept of statistical study types. This exercise helps you to understand what type of study is used for a particular situation, thus affecting the size and sample used in the research.
Multimedia 6.1	Sampling	Watch this video for perspective on what sampling is about. This video helps you to better understand the role sampling can have in your daily life experiences.
Reading 6.2	Bennett, J., Briggs, W. L., & Triola, M. F. (2014). <i>Statistical reasoning for everyday life</i> (4th ed., pp. 161-166). Boston, MA: Pearson.	This reading covers the statistical attributes around what is determined as normal. It also helps you to understand when a normal distribution would occur in a situation. This base knowledge enables you to better analyze the meaning of data for various size and sample distributions.
Multimedia 6.2	Normal vs. Not Normal	Watch this video for perspective on "normal vs. not

		normal" distributions. This video helps you to better understand what is considered a normal distribution and what is not considered a normal distribution in given scenarios.
Exercise 6.2	Normal Distribution Exercises	Complete this exercise to reinforce identifying normal distributions of various size and samples of data. Apply the concepts learned from the reading. Complete at least 10 exercise questions.
Reading 6.3	Bennett, J., Briggs, W. L., & Triola, M. F. (2014). <i>Statistical reasoning for everyday life</i> (4th ed., pp. 276-296). Boston, MA: Pearson.	This reading covers the concepts on sampling distributions, estimating population means, and estimating population proportions. This base knowledge enables you to better analyze the meaning of data for various size and sample distributions in your daily life.
Multimedia 6.3	Sampling and Parameters	Watch this video for a perspective on sampling and parameters in a given scenario. This video helps you to put things in perspective by describing how "sampling and parameters" play a role in statistics with various sizes and samples of populations.
Exercise 6.3	Does It Make Sense?	Complete this exercise to reinforce the application of sampling distributions, estimating population means, and estimating population proportions. Complete the problems and answer questions. These will help you put things in perspective on size and sampling in your daily life.
Assignment 6.1	Size and Sampling in the News	Data is everywhere. You have built a foundational knowledge of statistics that can help you organize data, interpret results, and describe meaning. In this learning outcome, you identified the role size and sample have on data, results, and meaning. Complete this assignment requiring you to

		<p>apply your understanding of how to put things in perspective by analyzing the size and sample of population used in a study or report. Search in the news for a sample mean and a sample proportion.</p>
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Dropbox Instructions

Please submit your Assignments to the Dropbox in order to receive faculty feedback. To submit to the Dropbox, click on the Dropbox tab at the top of the course content frame. Click on the Submit an Assignment link. Choose the designated Dropbox Basket title for the assignment. Click the Add Attachments button to browse for the assignment document on your computer that you would like to submit. After attaching the document, you may add comments to your instructor in the Comments field if you wish, then click the Submit button.

Discussions

You are expected to participate/post in each discussion thread/activity in the module. Responses are not merely a restatement of information or ideas already presented. You are expected to present new ideas for consideration, pose questions to explore a topic deeper, and/or add to perspectives presented.

To respond to the discussion topic: If you're the first to enter the Discussion, there will only be a **Respond** button. Otherwise, you will see other's postings below. Click on the **+ Expand All** button to view all of the entries made by your fellow learner or click each one, one at a time. Please pose your response and then return later, or tomorrow, to read and respond to your classmates.

Posttest

The Posttest for this Natural Science course assesses your knowledge of Science to Daily Life Experiences, Science Disciplines Integration, The Scientific Method, Science & Technology, Methods & Tools of Science, and Size & Scale.

The Posttest is an assessment of your knowledge of the material required for the competency. A score of 80 points or higher is required to demonstrate competency.

If you score less than 80 points on any competency you will have an opportunity to review the material and re-take the competency Posttest. You may take the Posttest assessment up to three times. If you have not passed the competency in three attempts, you will work with an Academic Coach to determine another method of fulfilling the program requirements in this subject. In order to demonstrate competency, a score of 80 points or higher is required.

If the term ends prior to you being able to demonstrate competency you will receive a grade of "I" and be required to complete the remaining competencies in the next term.

Content	Description	Time	Value	Notes
Posttest	Measures your competency of learning outcomes through essay, short answer, and multiple choice questions.	180 minutes	100 points	

