



SCIENCE INQUIRY I - INTEGRATED SCIENCE 351 601 SYLLABUS

Spring Semester 2018: Tuesday: 5:00-7:29 pm; Room 110

TAMU-Commerce Navarro Midlothian Campus

Mrs. Evelyn Restivo; Department of Physics and Astronomy

Evelyn.Restivo@tamuc.edu

Midlothian Campus TAMUC Office Phone 903-886-5488

COURSE INFORMATION

Optional Text: Teaching Science Through Inquiry and Investigation; Twelfth Edition; Terry L. Contant, Joel E. Bass, and Arthur A. Carin: Pearson

Course Description: Inquiry: Knowledge and Skills of Science

Science topics and themes are chosen to emphasize broad concepts highlighted in the Texas and National Science Standards. Topics will include conservation laws, systems in nature, the nature of scientific inquiry, and presentation of scientific information. The course will be taught using an inquiry/discovery based format, modeling instructional techniques proven effective by current educational research.

COURSE REQUIREMENTS

Course Goals: To provide a preliminary overview of science content and laboratory skills that will help prepare pre-service elementary teachers to teach science concepts as inquiry. Topics are correlated with Texas Essential Knowledge and Skills (TEKS) objectives, and with elementary science teacher competencies that will provide preparation to pass the science section on the certification exam.

Course Requirements: To be successful in IS 351 you must attend all classes, pay attention, participate in discussions, follow verbal and written instructions, complete lab activities and lab reports properly, research assigned topics, and prepare for testing. You need to become familiar with the TEKS, in abbreviated form for class, and in detail at the TEA web site: www.tea.state.tx.us. You will also need to become familiar with Safety Regulations from Flinn Scientific at www.flinnsci.com. Labs will require lined paper, unlined paper, graph paper and colored pencils. Most other materials and supplies will be provided.

Grading Scale: (100-90% = A; 89-80% = B; 79-70% = C; etc.)

Lab/Reports Average (drop lowest grade) 50%

Mid Term Project and Final Exam Average 40%

Attendance/Participation 10%

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures:

Attendance will be taken by means of a sign in sheet each class meeting. Missing three labs could be grounds for removal from class. The first portion of each class will review the previous concept and present an overview of the scheduled topic. The second portion of each class will be the lab activity for that topic.

Prime time for a break, if you need one, will be immediately after lab directions before you begin the lab. Lab reports will be done individually and/ or in groups and will be due at the end of each class unless otherwise stated. Labs will not be made up, the lowest lab grade will be dropped, and all other missed labs will be zeros. Prior notification and medical documentation may provide an excused second absence at the discretion of the instructor. At home lab reports and projects are due on the date listed, if you are absent your assignment is still due on that date. Exams may be rescheduled if the instructor is notified prior to the date, the absence can be documented as a medical emergency, and a convenient time to take the exam can be determined by the instructor.

Laboratory Safety dictates that NO food or drinks are allowed in the lab room. As you enter the lab room please remember to mute or turn off all cell phones/pagers or any electronic device that could disrupt the class. No cell phones are to be used for any purpose during class without prior approval of the instructor. Approval is only issued for lab data collection, research, calculations and timers. Any electronic device that disrupts exams will be cause for stopping the exam for the class.

For a complete listing of TAMU-Commerce Procedures go to:

www.tamcommerce.edu/administration/

University Specific Procedures:

ADA Statement:

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@tam-commerce.edu

Nondiscrimination Notice: A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Texas Senate Bill - 11: (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to:

(<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1

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*)

- 1/16 What's In Your Name; Welcome; Syllabus; Schedule; TEKS; Laboratory Regulations and Safety; Introduction to Lab Equipment; Thinking Maps; Brain Study; PPREAC and 5 "E" Notes; Metric Measurement Chart; "The Science Model: Objects in a Bag Lab"
- 1/23 Primarily Bears on the Go Lab: Learning colors and number combinations plus Stack and Track Bears Lab: Learning organization, assortment, distribution, probability, and non-traditional graphing
- 1/30 Bears Survival Discussion; Measurement Lab: Length, Volume, Mass and Temperature
- 2/6 Measurement Discussion; Determining the Difference Between Living and Non-Living in Life Cycles Lab
- 2/13 Living and Non-Living in Life Cycles Discussion; Assign at Home Lab Position and Direction of Motion: Speed, Velocity, Acceleration, Free Fall and Air Resistance (Due 2/27); Whole, Parts, and Parts of Parts: "Diary of a Worm" Lab
- 2/20 **CLASS WILL NOT MEET:** Work time for at Home Lab Position and Direction of Motion: Speed, Velocity, Acceleration, Free Fall and Air Resistance (Due 2/27)
- 2/27 Position and Direction of Motion: Speed, Velocity, Acceleration, Free Fall and Air Resistance Lab Due "Diary of a Worm" Discussion; What Has Eight Legs and Simple Eyes? "Diary of a Spider" Lab
- 3/6 "Diary of a Spider" Discussion; Assign MID TERM PROJECT (Due 4/10); Position and Direction of Motion: Speed, Velocity, Acceleration, Free Fall and Air Resistance Discussion; What has Six Legs and Two Wings? "Diary of a Fly" Lab
- 3/13 **CLASS WILL NOT MEET: TAMU-C** Late Winter/Spring Break
- 3/20 "Diary of a Fly" Discussion; Dichotomous Keys, Taxonomy, Classification Traits and Forensic Chemistry Lab
- 3/27 **CLASS WILL NOT MEET:** Work time for MID TERM PROJECT (DUE 4/10)
- 4/3 Classification Traits and Forensic Chemistry Lab Discussion; "Mouse Paint" Lab: Color Mixing and Pigments
- 4/10 "Mouse Paint" Lab Discussion; **MID TERM PROJECT PRESENTATIONS;** Science and Children Reading Report Assigned (Due 4/24)
- 4/17 **CLASS WILL NOT MEET:** Work time for Science and Children Reading Report
- 4/24 Science and Children Reading Report Due; Mid Term Project Discussion; Soapy Suds Lab
- 5/1 Soapy Suds Lab Discussion; Science and Children Reading Report Discussion; **FINAL EXAM**

"This document contains information which may be changed at the discretion of the instructor."