



SCIENCE INQUIRY II - INTEGRATED SCIENCE 352 601 SYLLABUS

Fall Semester 2017: Tuesday: 7:30-10:00 pm; Room 110

TAMU-Commerce Navarro Midlothian Campus

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IS 352

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: Science Inquiry II: Science topics and themes are chosen to emphasize broad concepts highlighted in the Texas and National Science Standards. Topics will include fundamental physical and chemical standards, processes and reactions, energy transfer in systems, and the nature of scientific inquiry. The course will be taught using an inquiry based format, modeling instructional techniques proven effective by current educational research.

IS 352

COURSE REQUIREMENTS

Course Goals and Information: To provide a continuation 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 352 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 more 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 and colored pencils.

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

Lab/Reports Average (drop lowest lab grade) 50%

Mid Term Project and Final Exam Average 40%

Attendance/Participation 10%

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@tamcommerce.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*)

8/29 Unique You, Welcome, Syllabus, Schedule, TEKS, Laboratory Regulations, Safety, PPREAC, 5 “E”, Metric Measurement, Thinking Maps, How the Brain Learns, “The Science Model” Somethings Fishy Lab

9/5 Measurement Lab: Observing, Investigating, Analyzing and Interpreting Data: “The Burning Candle”

9/12 Measurement Lab Discussion, Color Indicators and Chromatography Lab

9/19 Color Indicators and Chromatography Lab Discussion, Atomic Structure Models and an Overview of the Periodic Table Lab

9/26 Atomic Structure Models and an Overview of the Periodic Table Lab Discussion; Assign at Home Science and Children 3-2-1 Reading Report Due (10/10); Chemical and Physical Properties and Reactions Lab

10/3 **CLASS WILL NOT MEET:** Work time for at Home Lab Science and Children 3-2-1 Reading Report Assignment (Due 10/10)

10/10 Chemical and Physical Properties and Reactions Lab Discussion; Science and Children 3-2-1 Reading Report Assignment Due; Assignment of at Home Lab: Non-Traditional Graphing (Due 10/24); Assignment of MID TERM PROJECT EXAM (Due 11/14); Energy Transfer, Fluids and Surface Tension in Biology and Chemistry Lab

10/17 **CLASS WILL NOT MEET:** Work Time for at Home Lab Non-Traditional Graphing And Work time for MID TERM PROJECT EXAM (Due 11/14)

10/24 Science and Children Reading Report Discussion; At Home Lab Non-Traditional Graphing Due; Energy Transfer, Fluids and Surface Tension in Biology and Chemistry Discussion; Geology has its Faults Lab

10/31 At Home Lab Non-Traditional Graphing Discussion; Geology has its Faults Lab Mineral and Rock Types and The Rock Cycle Discussion, Galileo and Newton: Force and Motion Lab; Force and Dimensions of Craters Lab

11/7 **CLASS WILL NOT MEET:** Work time for MID TERM PROJECT EXAM

11/14 **MID TERM PROJECT EXAM DUE;** Galileo and Newton: Force and Motion Discussion; Force and Dimensions of Craters Lab Discussion; Jet Straw Lab

11/21 **THANKSGIVING BREAK; CLASS WILL NOT MEET**

11/28 Jet Straw Lab Discussion; Energy Transfer in Geology and Physics Lab

12/5 Energy Transfer in Geology and Physics Discussion; **FINAL EXAM**

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