Integrated Science 352.51E
Science Inquiry II
COURSE SYLLABUS: Spring 2022

Instructor: Kenric Davies, MAT
Office Hours: By Appointment ONLY WF 6:00-8:00 pm
Zoom Meeting ID: https://zoom.us/j/3512721625
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COURSE INFORMATION

Textbook: IS 352 Lab Manual 2020, available at the campus bookstore (ISBN: 978-1-64565-041-6)

Course Description

Science topics and themes are chosen to emphasize broad concepts highlighted in the Texas and National Science Standards. Topics include fundamental physical and chemical processes such as the chemistry of the environment, macromolecules of life, systems in nature, and the nature of scientific inquiry. The course will be taught using an inquiry based method, modeling instructional techniques proven effective by current educational research. This course is designed for interdisciplinary majors. It will not count towards a major in the sciences. Prerequisites: Junior level standing.

Practical description
Science spans a broad range of topics, from biology to geology to astronomy. More than just a collection of facts, science provides a way of learning about and understanding the world. Scientific study leads to many technological advances. Science can be both fun and interesting to learn. In this course, the nature of science and the scientific method are introduced. Critical thinking is emphasized. Primarily chemistry related topics are covered. These topics include states of matter, atoms and molecules, the periodic table, chemical reactions, and acids and bases. This course models inquiry based teaching methods.

Student Learning Outcomes

1. Students will be able to describe the parts of the atom.
2. Students will be able to determine whether a change is physical or chemical.
3. Students will be able to find science lessons appropriate for use in K-8 classrooms and identify which TEKS they satisfy.

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

Lecture and/or readings will be used to introduce topics. Students are encouraged to ask questions during lecture. However, the primary instructional method for this course will be hands-on activities. Activities will be completed in groups of 3-4. The instructor will assign groups. Groups will be changed 1-2 times during the semester.

Education research shows that learning is enhanced through group work. Students can do more together than they can do on their own.

GRADING

Grades will be based on four components:

Exams	45%
Notebook	25%
Homework	20%
In-class activities and labs	10%

Grading scale:

90% < A <100%
80% < B < 89%
70% < C < 79%
60% < D < 69%
F < 60%

In order to pass the course, you **must achieve a 65 or higher on at least one exam** (first exam, second exam, or final), regardless of your average calculated using the above weighting.

Exams: There will be two midterms and a final. They will be weighted equally. Midterms will be scheduled at least two weeks in advance. The date will depend on the speed at which material is covered. See the course outline for *approximate* dates. Make-up exams will only be allowed for excused absences. See course policies below for details on excused absences.

Notebook: Guidelines for the notebook will be provided in a separate document.

In-class activities and labs: Activities and labs will be graded. Assignments will be completed as a group, but your effort will determine your individual score. Your lowest grade will be dropped. Group activities can only sometimes be made up.

Homework: Homework will be graded. Assignments will be graded individually. Your lowest grade will be dropped.

Class participation: You will receive a participation grade for *each class day* (except the first day and exam days) based on your participation in group activities. The lowest three grades will be dropped.

Participation grade calculation:

1. An absence will result in a zero for the missed class. This includes excused absences. If you have more than 3 excused absences, the resulting zeroes will be dropped before calculation of your average. (See course policies below for details on excused absences.)
2. Missing 15-35 minutes of class will result in a 20 point deduction. Missing more than 35 minutes of class will result in a 50 point deduction. This includes tardiness, leaving early before finishing all class activities, or missing a portion of the middle of class.
3. The instructor will provide students with their participation through the D2L-Brightspace grade portal.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

1. Attendance will be taken by sign-in sheet and verified by seating chart at the beginning of class.

2. The instructor must be notified by email (kenric.davies@tamuc.edu) about any excused absences **no later than 24 hours after the missed class**. Even if you choose to notify the instructor in person, you **must still follow up with email** within 24 hours of the missed class. If you do not follow this policy, you will have the zero participation grade counted and may not be able to make up a missed exam.

3. You are responsible for obtaining notes and class announcements from missed classes.

4. Excessive absences may result in being dropped from the course.

5. When emailing the instructor, include the **course and section number in the subject line**.

6. You are expected to check your email at least once a day for class announcements. Emails will be sent to the email addresses you provided to MyLeo. Notify the instructor if you would prefer to receive emails at a different address.

7. Homework is due at the beginning of class.

8. Students should fully participate in class activities. Failure to do so will impact the student's class participation grade.

9. Students are expected to be professional and respectful and take responsibility for their learning. If you find yourself struggling, the instructor is available to provide extra help outside of class.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette
http://www.albion.com/netiquette/corerules.html

TAMU-C Attendance
For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity
Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:
Undergraduate Academic Dishonesty 13.99.99.R0.03
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf
Graduate Student Academic Dishonesty 13.99.99.R0.10
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

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

Email: Rebecca.Tuerk@tamuc.edu
StudentDisabilityServices@tamu-commerce.edu

Nondiscrimination Statement
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.

Campus Concealed Carry
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

COURSE OUTLINE / CALENDAR

Date	(**Exam dates are approximate**.)
1/18	Syllabus, Relationships, Nature of Science
1/25	Properties of Matter
2/1	States of Matter
2/8	Physical/ Chemical Changes
2/15	**Exam 1 – Matter and Physical/ Chemical Changes**
2/22	Atoms
3/1	Periodic Table
3/8	Elements, Compounds, Mixtures
3/15	**No Class – Spring Break**
3/22	Balancing Chemical Equations
3/29	Balancing Chemical Equations
4/5	**Exam 2 – Atoms, Elements, Reactions**
4/12	Acids & Bases, pH
4/19	Sugars and Starches
4/26	Fats and Vitamins
5/3	Review
5/10	**Final Exam (normal class time)**