



SCIENCE INQUIRY II - INTEGRATED SCIENCE 352.401
SYLLABUS Online

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Office Hours: By Appointment Only

COURSE INFORMATION

Optional Text: IS 352 Book of Activities, (Available at the campus bookstore)

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. This course is intended as a continuation of IS 351. Topics will include properties of matter, periodic table and atomic structure, balancing equations, reactions, teaching methods, and learning styles in the classroom. 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:

Video Lecture, online labs, and reading will be used to introduce and discuss topics. Students are encouraged to ask questions during office and through online discussions. Virtual office hours are available to students Wednesdays from 7-9 pm CST. Students are encouraged to attend to ask questions and discuss topic with classmates. There are no live lectures.

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

Exams (2 each worth 20%)	40%
Notebook (1 worth 25%)	25%
Lab Reports (10 each worth 2%)	20%
Notebook Checks (4 each worth 2%)	8%
Discussions (12 each worth 0.58%)	7%

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In order to pass the course, you must achieve a 60 or higher on at least one exam (first exam, second exam, or final) and complete the Notebook, regardless of your average calculated using the above weighting.

Exams: There will be two midterms and an optional final. They will be weighted equally with the Final able to replace one of the previous exam grades. ***In order to be able to replace an exam grade, both midterms must be completed on time and in their entirety.*** 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. The notebook must be completed in order to pass the course. A notebook check will be required for each Friday of the course. This is to ensure that you are progressing through the material at an appropriate rate.

Lab Reports: Lab reports will be done individually will be due according to the due dates on the syllabus below. Labs will not be made up, the lowest 2 lab grade will be dropped, and all other missed labs will be zeros. This means for all students 10 out of 12 labs will count towards final average.

Discussion Board: As an online course, our discussion boards will work like attendance and participation in a face-to-face class.

Each week, students will be required to post an original answer to a thread provided by the professor except for weeks of midterms. The response should be approximately 150 - 200 words in length and adequately cover the content and subject matter. Each discussion board will be due on Wednesday at 11:59 pm

Students will also be required to reply one thread. Each response should be about 100 words in length. Responses should “continue the conversation”, such as discussing the examples provided or adding new examples that illustrate the original posters threads. Each discussion board reply will be due on Thursday at 11:59 pm

Any outside resources used in creating post must be cited or the student risks plagiarizing content.

UNIVERSITY PROCEDURES/POLICIES

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@tamu-commerce.edu

[Student Disability Resources & Services](#)

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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*).

Plagiarism

Plagiarism is a criminal activity. You must cite all sources of information. Unreferenced copying of material can result in a score of zero for your assignments and may result in further disciplinary action.

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Units	Due Dates
Unit 1: Teaching and Learning Methods (1/11- 1/23) Topic 1: How is teaching Science Different than other subjects? Topic 2: Teaching the Diverse Science Student Topic 3: The 5E Method and Assessment	Discussion Boards: Board 1- Original Post 1/13, Reply 1/14 Board 2- Original Post 1/20, Reply 1/21 Labs: Lab 1- due 1/15 @ 11:59 pm Lab 2- due 1/22 @ 11:59 pm Notebook Check 1: Due by 1/23 @ 11:59 pm
Unit 2: Properties of Matter (1/25-2/19) Topic 1: States of Matter, Pressure, and Energy Topic 2: Compounds, Solutions, and Mixtures and Physical Properties of Matter Topic 3: Chemical Properties of Matter and Properties vs Change	Discussion Boards: Board 3- Original Post 1/27, Reply 1/28 Board 4- Original Post 2/3, Reply 2/4 Board 5- Original Post 2/10, Reply 2/11 Labs: Lab 3- due 1/29 @ 11:59 pm Lab 4- due 2/5 @ 11:59 pm Lab 5- due 2/12 @ 11:59 pm Notebook Check 2: Due by 2/13 @ 11:59 pm Midterm 1: Due by 2/19 @ 11:59 pm
Unit 3: Atomic Structure (2/22-3/13) Topic 1: The History of the Atom, the Parts of the Atom Topic 2: Atomic Structure and the Periodic Cube Topic 3: The Electron	Discussion Boards: Board 6- Original Post 2/24, Reply 2/25 Board 7- Original Post 3/3, Reply 3/4 Board 8- Original Post 3/10, Reply 3/11 Labs: Lab 6- due 2/26 @ 11:59 pm Lab 7- due 3/5 @ 11:59 pm Lab 8- due 3/12 @ 11:59 pm Notebook Check 3: Due by 3/13 @ 11:59 pm
Unit 4: Bonding (3/15- 3/26) Topic 1: The Periodic Table Revisited and Lewis Dots Topic 2: Electronegativity and Ionic/Covalent Bonding	Discussion Boards: Board 9- Original Post 3/17, Reply 3/18 Board 10- Original Post 3/24, Reply 3/25 Labs: Lab 9- due 3/19 @ 11:59 pm Lab 10- due 3/26 @ 11:59 pm

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Units	Due Dates
Unit 5: Balancing Equations (3/26- 4/9) Topic 1: Law of Conservation of Mass Topic 2: Balancing Equations Chemical Equations	Discussion Boards: Board 11- Original Post 3/31, Reply 4/1
	Lab: Lab 11- due 4/2 @ 11:59 pm
	Notebook Check 4: Due by 4/3 @ 11:59 pm
	Midterm 2: Due by 4/9 @ 11:59 pm
Unit 6: Chemical Reactions (4/12-4/23) Topic 1: Chemical Reactions and the 6 types Topic 2: Acids/ Bases	Discussion Board: Board 12- Original Post 4/14, Reply 4/15
	Lab: Lab 12- due 4/23 @ 11:59 pm
	Final Notebook Due by 4/26 @ 11:59 pm
	Optional Final Exam: Due by 4/29 @ 11:59 pm

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