



**Integrated Science 451.01W, 23382
COURSE SYLLABUS: Spring 2023**

Instructor: Dr. Cheri Davis

Office Location: Science #148

Office Hours: Tuesday & Thursday 11am to noon via Zoom (a link will be provided in the course shell), or you are welcome to stop by my office if you are on campus.

Class Hours: WEB: Online units will open each Monday morning and all units will have assigned due dates, observe due dates.

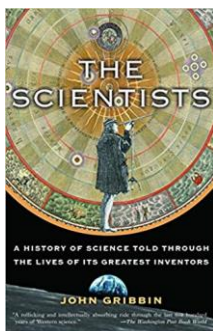
Office Phone: 903 468 8650

Email Address: Cheri.Davis@TAMUC.edu

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings:

Required Textbook: [The Scientists: A History of Science Told Through the Lives of Its Greatest Inventors](#) by [John Gribbin](#) and [Adam Hook](#)



We will be accessing and posting to D2L (eCollege); full participation is required. This is a web-based course.

Course Description:

Science is an interesting and diverse topic that influences the quality of life. It is the instructor's intent to demonstrate the possibility that learning and ultimately teaching can be enjoyable as well as educational. By the end of the course, each student should have an understanding of his/her own philosophy of teaching.

This class will use the history of science as a timeline, which we will explore in detail. Some of the concepts studied will include the great leaders in science and their contributions, including but not limited to: biology, models of the solar system, star formation, energy, force and motion, the periodic table, spectroscopy, thermodynamics, continental drift, and plate tectonics.

The instructor reserves the right to make topic changes, eliminate or add to the above list at discretion.

Student Learning Outcomes:

1. Students will gain a better pedagogical understanding.
 - Students will understand different teaching methods and how these methods have developed and advanced over time.
 - Students will learn to develop quality laboratory experiments.
 - Students will develop a plan for laboratory safety and classroom management.
2. Preservice teachers will be better prepared to achieve success completing the TExES exam.
 - Students will understand the basic methodology of science through experimentation.
 - Students will understand the meaning, application, and concepts of basic science disciplines. The areas of study vary each semester as students have the option to explore topics of their selection.
3. Students will learn scientific principles to provide interesting and practical science knowledge and skills for facilitating classroom instruction and everyday life applications.
 - Student will complete a research paper over an approved topic.
 - Students will develop a timeline for the advancement of science and apply progression to their selected topic.
 - Students will develop an individual thematic unit supporting their research paper topic.
4. Students will complete one of the following QEP requirements and submit one artifact.
 - Students will be able to demonstrate knowledge of the interconnectedness of global dynamics (issues, process, trends, and systems).
 - Students will be able to apply knowledge of the interconnectedness of global dynamics.
 - Students will be able to view themselves as engaged citizens within an interconnected and diverse world by the development of a lesson that can be used in their classroom including diverse populations.

<h2>COURSE REQUIREMENTS</h2>

Instructional / Methods / Activities Assessments

This course will be different than most science classes as students will have an opportunity to select and develop content for the topics studied. The students will be encouraged to contribute individual reflection, knowledge, research, and content.

The instructional methods for this course will vary with the topic being explored however the full course will be online. All material and all coursework will be uploaded through D2L in the course module. All assignments must be uploaded into the course, Google documents not accepted.

Assignments will build as the course progresses; therefore, students are encouraged to organize and keep the developed content. All assignments will have a due date specified at the time the assignment is made. All due dates are given in advance; take them seriously as late work is not accepted. Each unit will be open for a specific amount of time. When a unit is completed and closes it will no longer be accessible.

Grading

The following scale will be used for determining final course grades:
Course work -60%, exams-40% (20% each: 1 midterm & a final)

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

Tentative Exam Schedule

- 1) March 23
- 2) Final Exam, online May 5

Plagiarism or cheating will not be tolerated for any reason and violation will provide the individual(s) involved with a failing grade and a referral to the dean's office for further disciplinary action.

TECHNOLOGY REQUIREMENTS

This course is taught fully online. Students will need reliable internet access, a computer (there are computer labs on campus), ability to post assignments, and access reading material. Students will be using D2L through myLeo and will be submitting assignments through Doc Sharing. **All assignments will be uploaded into the course shell; Google documents that require a login will not be accepted.**

Preservice teachers need to incorporate technology into their learning so that they can take this knowledge and understanding into their classrooms as they facilitate learning. Throughout this course, students will be using technology to complete coursework. Students will need computer and printer access to complete and upload assignments. All written work should be typed, including citations. **Emailing your assignments instead of uploading is not acceptable.**

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

Students are welcome to visit during office hours **or at any other time I am in my office and available**. For a specific time outside of the scheduled office hours please feel welcome to call my office or email to schedule an appointment.

All written communication needs to be through email at this address: Cheri.Davis@tamuc.edu

Students will be expected to regularly check their email provided by the University through D2L as this address is provided to the instructor. In ALL email, students are required to include the following information in the subject line: the course name, student's name, and a (very) brief statement/inquiry.

e.g. Subject: IS 451, Davis, Cheri, lesson #3 question

This will allow all inquiries to be answered as soon as possible. If a response is not received within 2-weekdays then assume there was a problem with the email and please follow-up with other means of communication.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Policies:

Violation of any class policies will be reflected on the student's final grade for the course.

1. Be professional. You are completing your degree and preparing for the classroom as the facilitator of instruction. Your attitude should reflect your professionalism which should include the remaining class policies.
2. Be here. Although the course is fully facilitated online, be aware of the time commitment for an online class and make sure that you are regularly setting aside time each week to complete the required work. **Content missed cannot be made up.** For clarity, if you miss due dates, you will receive a zero for any content not uploaded into the course on time. One issue to be aware of with digital assignments, once closed, they will not be reopened.
3. Be on time. The modules for this course will open each Monday morning (roughly by 10 am) and assigned due dates will be posted on each module. Most will open on Monday and close the following Sunday at 11 pm. This will allow you the weekend to complete work.

As a teacher, you will be expected to turn in grades on time as well as meeting other deadlines; again, be professional. All due dates are given in advance; take them seriously as **late work is not accepted.** Units will be open for a specific time range, once a unit has closed, it will no longer be accessible.

Extra credit will not be offered, so make sure that you are turning in your “best” effort with the first iteration and your submissions are on time for credit.

4. Be courteous. Practice netiquette, develop your “professional attitude” as we communicate as a class and with each other.

Course Specific Procedures:

1. Students will be responsible for their learning and participate fully with a positive attitude.
2. Students will have all work completed on time.
3. Students will participate and contribute equally on all assignments.
4. Make sure all work that is submitted is the best example of your ability.
5. Students will meet the requirements for a “Global Learning” assignment. (see SLO #4)

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

4-8 SCIENCE STANDARDS: https://tea.texas.gov/sites/default/files/4-8sci_0.pdf

Standard I. The science teacher manages classroom, field, and laboratory activities to ensure the safety of all students and the ethical care and treatment of organisms and specimens.

Standard II. The science teacher understands the correct use of tools, materials, equipment, and technologies.

Standard III. The science teacher understands the process of scientific inquiry and its role in science instruction.

Standard IV. The science teacher has theoretical and practical knowledge about teaching science and about how students learn science.

Standard V. The science teacher knows the varied and appropriate assessments and assessment practices to monitor science learning.

Standard VI. The science teacher understands the history and nature of science.

Standard VII. The science teacher understands how science affects the daily lives of students and how science interacts with and influences personal and societal decisions.

Standard VIII. The science teacher knows and understands the science content appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in physical science.

Standard IX. The science teacher knows and understands the science content appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in life science.

Standard X. The science teacher knows and understands the science content appropriate to teach the statewide curriculum (Texas Essential Knowledge and Skills [TEKS]) in Earth and space science.

Standard XI. The science teacher knows unifying concepts and processes that are common to all sciences.

Secondary Science Standards: <https://tea.texas.gov/texas-educators/preparation-and-continuing-education/approved-educator-standards>