

Integrated Science 451.001, 23382 COURSE SYLLABUS: Spring 2022

Instructor: Dr. Cheri Davis **Office Location:** Science #148

Office Hours: Monday – Thursday 8:30-9:30 am or anytime my office is open and I am

available.

Class Hours: Monday & Wednesday 9:30-10:45 am, STC 107 **Office Phone:** 903 468 8650 **Office Fax:** 903 468 8651

Email Address: Cheri.Davis@TAMUC.edu

COURSE INFORMATION

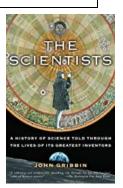
Materials – Textbooks, Readings, Supplementary Readings:

"The Scientist" is the recommended text for this course.

The text is available from the campus bookstore or online from Amazon (in different formats).

https://www.amazon.com/s?k=the+scientists&ref=nb sb noss 1

We will be accessing and posting to D2L (eCollege); full student participation is required.



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 identify different learning styles.
 - Students will be able to determine how teaching and learning styles compliment or support material in various situations.
 - 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 learn and practice student-centered instruction.
- 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.

COURSE REQUIREMENTS

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. Students will be attentive through any lecture, providing the instructor/presenter their full attention. Questions will be welcomed and are encouraged during lecture, however students will not engage in personal discussions thus disrupting class.

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.

Grading

The following scale will be used for determining final course grades: Class attendance-15%, exams-25%, projects & daily assignments-35%, research & presentation-25%.

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

1) March 7

2) April 18

3) Finals Week

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 as a face-to-face class but is also web-enhanced. Students need access to a computer (there are computer labs on campus) in order to check e-mails, post assignments, and to share approved information. Students will be using eCollege through D2L and will be submitting assignments through Doc Sharing.

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 tools and technology to complete laboratory procedures. Students will need computer and printer access to complete various assignments. All written work should be typed, including citations as needed. Emailing your assignments instead of printing and turning in is not acceptable. Students should expect a large amount of printing through the duration of this course.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

I will be working with a large number of students in several classes this semester. 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 eCollege 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. Absences will result in lowering your overall grade. If you know in advance that you are going to miss class, **please inform me via-email as soon as it becomes apparent you will miss class.** A missed exam needs to be taken before they are graded and returned to the class, usually the next class period.
- 3. Be on time. Tardiness is a direct reflection of your professional attitude. This class meets Monday and Wednesday from 9:30-10:45 am in STC #107. This is a very short amount of time and must be utilized effectively. Excessive tardiness will result in a low participation grade for this course and will be reflected in student's final grade.

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**. Absences will not be considered a "good reason" for turning in late assignments. Turning in work early is always an option.

4. Be courteous. <u>Cell phones will be turned off</u>; failure to comply will result in the student being excused from class. I will give you my undivided attention and I expect the same of each student. No electronic devices (this includes use of a computer, tablet, or iPad) will be permitted during class unless arrangements are made in advance with the instructor. Computers are available for classroom use as needed.

Course Specific Procedures:

- 1. Students will be responsible for their learning and participate in all class activities with a positive attitude.
- 2. Students will have all homework completed upon entering class. Again, late work is not accepted so do not be late to class. Students will not attempt to work on any material for another class. A missed exam needs to be taken before they are graded and returned to the class, usually the next class period.
- 3. Students will participate and contribute equally in group activities. Failure to comply will be reflected in the non-compliant student's grade and will not be a detriment to the remaining group members. All collaborative assignments will have an individual grade for each student dependent upon their contribution, collaboration, content, and professionalism.
- 4. 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:

((<u>http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf)</u> 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.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

COURSE OUTLINE

Domain IV-Science

Competency 25 scientific inquiry

Competency 27 unifying concepts and processes in science theory and practice of science teaching assessments in science learning

Competency 30-34 physical science

Competency 35-37 life science

Competency 38-41 Earth and space science