



# **Integrated Science 351.51W**

## **Inquiry: Knowledge and Skills of Science**

COURSE SYLLABUS: Spring 2021

### **INSTRUCTOR INFORMATION**

**Instructor:** Kenric Davies, MAT

**Office Hours: By Appointment ONLY** M 5:30-7:30 & W 6:00-8:00 pm

Zoom Meeting ID: <https://zoom.us/j/3512721625>

**University Email Address:** [kenric.davies@tamuc.edu](mailto:kenric.davies@tamuc.edu)

**Preferred Form of Communication:** Email

**Communication Response Time:** Approximately 48 hrs.

### **COURSE INFORMATION**

**Textbook:** IS 351B Lab Manual eBook (ISBN: 978-1-61740-948-6), purchase 150 day access at <https://bit.ly/IS351-B-eText>

### **Course Description**

Science topics and themes are chosen to emphasize broad concepts highlighted in the Texas and national science standards. Topics will include conservation laws, systems in nature, the nature of scientific inquiry and presentation of scientific information. The course will be taught by an inquiry based method, modeling instructional techniques proved effective by current educational research. This course is designed for interdisciplinary majors. It will not count toward a major or minor in the sciences. Prerequisite: 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 physics related topics are covered. These topics include Newton's Laws, energy, circuits, and waves. This course models inquiry based teaching methods.

*The syllabus/schedule are subject to change.*

## **Student Learning Outcomes**

1. Students will explore motion with constant velocity and constant acceleration
2. Students will be able to apply Newton's Three Laws.
3. Students will explore topics in Astronomy including seasons, the Moon, and the Solar System.
4. Students will be able to find science lessons appropriate for use in K-8 classrooms and identify which TEKS they satisfy.

## **COURSE REQUIREMENTS**

### **Minimal Technical Skills Needed**

Students need to be able to access the online course management system (D2L/Brightspace) and be familiar with Microsoft Word, PowerPoint, and Excel and/or Google Docs, Slides, and Sheets. Students will also need to be able to upload scanned or photographed assignments to the online course management system (D2L/Brightspace)

### **Instructional Methods**

**This course is a completely ONLINE course for the Spring 2021 semester.**

Virtual recorded lectures and/or readings will be used to introduce topics. Students are encouraged to ask questions while reviewing material throughout the week. However, the primary instructional method for this course will be hands-on activities from the course lab manual presented in a virtual setting. Activities can be completed in groups up to 4. Students may choose their own groups at the beginning of the semester, but the instructor may assign groups at a later date.

Education research shows that learning is enhanced through group work. Students can do more together than they can do on their own. A discussion board will be created to facilitate students finding others to work with on course assignments.

### **Student Responsibilities or Tips for Success in the Course**

Students should log in to D2L/Brightspace weekly (by Monday at the latest) to obtain information about assignments and posted materials. All assignments will be due by the following **Sunday at 11:59** pm each week.

## **GRADING**

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

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Grades will be based on four components:

Exams	45%
Notebook	25%
Homework	20%
Class attendance/ participation	10%

## Assessments

In order to pass the course, you **must achieve a 60 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.

Homework: Up to 10 homework assignments will be assigned throughout the semester. Homework is due at the end of each week; on the following **Sunday at 11:59 pm**. Homework will be accepted up to a week late; 25% will be taken off if received up to one week late. Homework will not be accepted after one week from the due date.

## TECHNOLOGY REQUIREMENTS

### LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

## ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

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## COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

### Interaction with Instructor Statement

The instructor will return email communication within two days (48 hrs) of initial email. All major assessments (tests/notebook) will be graded within one (1) week of submission.

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

### Course Specific Procedures/Policies

1. Attendance will be taken by completing assignments by the due date each week. All assignments are due by the following **Sunday 11:59 pm** the week they are assigned.
2. You are responsible for checking D2L/Brightspace for weekly announcements and assignments.
3. Excessive incomplete assignments may result in being dropped from the course.
4. When emailing the instructor, include the **course and section number in the subject line**.
5. 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.
6. Homework is due by online submission at the end of each week. The due date is the following **Sunday at 11:59 pm**.
7. Students should fully participate in class activities. Failure to do so could impact the student's class attendance/participation grade.
8. 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 during scheduled office hours.

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## **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/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

### **TAMUC Attendance**

For more information about the attendance policy please visit the [Attendance 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>

### **Students with Disabilities-- 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:

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## Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

### Nondiscrimination Notice

Texas A&M University-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 Statement

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 the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

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

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

Week (Exam dates are approximate.)	3/1	Forces – Newton’s 3 <sup>rd</sup> Law
1/11 Syllabus, Relationships, Nature of Science	3/8	Energy – Work & Energy
1/18 Motion – Constant Velocity	3/15	Energy – Conservation of Energy
1/25 Motion – Motion Graphs	<b>3/22</b>	<b>Exam 2 – Forces &amp; Energy</b>
2/1 Motion – Constant Acceleration	3/29	Astronomy – Seasons
<b>2/8</b> <b>Exam 1 – Motion</b>	4/5	Astronomy – Moon Phases
2/15 Forces - Inertia	4/12	Astronomy – Solar System
2/22 Forces – Newton’s 2 <sup>nd</sup> Law	4/19	Review
	4/26	<b>Final Exam</b>

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