



# **Integrated Science 352.02E**

## **Science Inquiry II**

### **COURSE SYLLABUS: Spring 2018**

**Instructor:** Dr. Robynne Lock

**Office Location:** STC 238

**Office Hours:** W 11:00-12:00, R 2:00-4:00, or by appointment

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**Learning assistant:** Anna Orio

## **COURSE INFORMATION**

### **Textbooks:**

- Next Gen PET Magnetism and Static Electricity (ISBN #978-1-68231-284-1)
- Next Gen PET Matter and Interactions (ISBN #978-1-68231-288-9)
- IS 352.02E Lock Course Packet, available at the campus bookstore

### **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 developing models, static electricity, states of matter, atoms and molecules, the periodic table, and chemical reactions. This course models inquiry based teaching methods.

## **Student Learning Outcomes**

1. Students will be able to develop models from observations of physical systems.
2. Students will be able to determine whether a change is physical or chemical.
3. Students will be able to develop science lessons appropriate for use in K-8 classrooms and identify which TEKS they satisfy.

## **COURSE REQUIREMENTS**

### **Instructional / Methods / Activities Assessments**

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	30%
In-class team contributions	15%
Science journal	5%
Homework/Quizzes	25%
Lesson plan projects	25%

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. 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.

In-class team contributions: Your effort to learn and your contribution to your group will determine your grade. This will be assessed through random collection of in-class activities, group work surveys, and attendance. Excused absences will not affect your grade. **For an absence to be excused, you must notify the instructor within 24 hours of your absence.**

Science journal: You will keep a journal of what you learned in class each day and what you still need to learn. Your journal will be collected and graded during exams. Details of the requirements for your science journal will be provided in a separate document.

Homework/Quizzes: Every homework assignment will be followed by an online quiz. Assignments will be graded individually. Your lowest grade will be dropped.

Lesson plan projects: We will create a “notebook” as a class that covers all of the TEKS for a single grade level. Each student will create two lesson plans during the semester and share them with the class through Google Drive.

## TECHNOLOGY REQUIREMENTS

- You must have access to a scanner or a phone that takes scanner quality images in order to turn in problem set homework and exams.
- You must have access to Skype to participate in office hours.
- To fully participate in online courses you will need to use a current Flash enabled browser. For PC users, the suggested browser is Google Chrome or Mozilla Firefox. For Mac users, the most current update of Firefox is suggested.
- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - 512 MB of RAM, 1 GB or more preferred
  - Broadband connection required courses are heavily video intensive
  - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
  - Sound card, which is usually integrated into your desktop or laptop computer
  - Speakers or headphones.
  - \*For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site](http://www.java.com/en/download/manual.jsp)  
<http://www.java.com/en/download/manual.jsp>

- Current anti-virus software must be installed and kept up to date.
- Run a browser check through the Pearson LearningStudio Technical Requirements website.  
[Browser Check](http://help.ecollege.com/LS_Tech_Reg_WebHelp/en-us/#LS_Technical_Requirements.htm#Browse) [http://help.ecollege.com/LS\\_Tech\\_Reg\\_WebHelp/en-us/#LS\\_Technical\\_Requirements.htm#Browse](http://help.ecollege.com/LS_Tech_Reg_WebHelp/en-us/#LS_Technical_Requirements.htm#Browse)

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.  
JavaScript is enabled.  
Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - [Adobe Reader](https://get.adobe.com/reader/) <https://get.adobe.com/reader/>
  - [Adobe Flash Player](https://get.adobe.com/flashplayer/) (version 17 or later) <https://get.adobe.com/flashplayer/>
  - [Adobe Shockwave Player](https://get.adobe.com/shockwave/) <https://get.adobe.com/shockwave/>
  - [Apple Quick Time](http://www.apple.com/quicktime/download/) <http://www.apple.com/quicktime/download/>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.
- For additional information about system requirements, please see: [System Requirements for LearningStudio](https://secure.ecollege.com/tamuc/index.learn?action=technical) <https://secure.ecollege.com/tamuc/index.learn?action=technical>

## ACCESS AND NAVIGATION

### Pearson LearningStudio (eCollege) Access and Log in Information

This course will be facilitated using Pearson LearningStudio, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to [myLeo](http://www.tamuc.edu/myleo.aspx).  
<http://www.tamuc.edu/myleo.aspx>

**You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).**

It is strongly recommended that you perform a "Browser Test" prior to the start of your course. To launch a browser test, login to Pearson LearningStudio, click on the "My Courses" tab, and then select the "Browser Test" link under Support Services.

### Pearson Learning Studio Student Technical Support

Texas A&M University-Commerce provides students technical support in the use of Pearson LearningStudio.

Technical assistance is available 24 hours a day/ 7 days a week.

If at any time you experience technical problems (e.g., you can't log in to the course, you can't see certain material, etc.) please contact the Pearson LearningStudio Help Desk, available 24 hours a day, seven days a week.

The student help desk may be reached by the following means 24 hours a day, seven days a week.

- **Chat Support:** Click on '*Live Support*' on the tool bar within your course to chat with a Pearson Learning Studio Representative.
- **Phone:** 1-866-656-5511 (Toll Free) to speak with Pearson Learning Studio Technical Support Representative.

**Accessing Help from within Your Course:** Click on the '*Tech Support*' icon on the upper left side of the screen inside the course. You then will be able to get assistance via online chat, email or by phone by calling the Help Desk number noted below.

**Note:** Personal computer 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, an Internet cafe, or a bookstore, such as Barnes & Noble, etc.

## Policy for Reporting Problems with Pearson LearningStudio

Should students encounter Pearson LearningStudio based problems while submitting assignments/discussions/comments/exams, the following procedure **MUST** be followed:

1. Students must report the problem to the help desk. You may reach the helpdesk at 1-866-656-5511.
2. Students **MUST** file their problem with the helpdesk and obtain a helpdesk ticket number
3. Once a helpdesk ticket number is in your possession, students should email me to advise me of the problem and to provide me with the helpdesk ticket number
4. At that time, I will call the helpdesk to confirm your problem and follow up with you

**PLEASE NOTE:** Your personal computer/access problems are not a legitimate excuse for filing a ticket with the Pearson LearningStudio Help Desk. You are strongly encouraged to check for compatibility of your browser **BEFORE** the course begins and to take the Pearson LearningStudio tutorial offered for students who may require some extra assistance in navigating the Pearson LearningStudio platform. **ONLY** Pearson LearningStudio based problems are legitimate.

### myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu) or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at [myLeo](https://leo.tamuc.edu). <https://leo.tamuc.edu>

### Learner Support

Go to the following link [One Stop Shop](http://www.tamuc.edu/admissions/onestopshop/)- created to serve you by attempting to provide as many resources as possible in one location. <http://www.tamuc.edu/admissions/onestopshop/>


Go to the following link [Academic Success Center](http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/)- focused on providing academic resources to help you achieve academic success.

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

## FREE MOBILE APPS

The Courses apps for phones have been adapted to support the tasks students can easily complete on a smaller device. Due to the smaller screen size course content is not presented.

The Courses app is free of charge. The mobile Courses Apps are designed and adapted for different devices.

	<b>App Title:</b>	<b>iPhone – Pearson LearningStudio Courses for iPhone</b> <b>Android – LearningStudio Courses - Phone</b>
	<b>Operating System:</b>	<b>iPhone</b> - OS 6 and above <b>Android</b> – Jelly Bean, Kitkat, and Lollipop OS
	<b>iPhone App URL:</b>	<a href="https://itunes.apple.com/us/app/pearson-learningstudio-courses/id977280011?mt=8">https://itunes.apple.com/us/app/pearson-learningstudio-courses/id977280011?mt=8</a>
	<b>Android App URL:</b>	<a href="https://play.google.com/store/apps/details?id=com.pearson.lsphone">https://play.google.com/store/apps/details?id=com.pearson.lsphone</a>

Once downloaded, search for Texas A&M University-Commerce, and it should appear on the list. Then you will need to sign into the myLeo Mobile portal.

The Courses App for Android and iPhone contain the following feature set:

- View titles/code/Instructor of all Courses enrolled in online
- View and respond to all discussions in individual Courses
- View Instructor Announcements in individual Courses
- View Graded items, Grades and comments in individual Courses
- Grade to Date
- View Events (assignments) and Calendar in individual Courses
- View Activity Feed for all courses
- View course filters on activities
- View link to Privacy Policy
- Ability to Sign out
- Send Feedback

## LEARNINGSTUDIO NOTIFICATIONS

Students can be alerted to course activities via text on their mobile phones or up to two email addresses.

To begin setting up notifications, go into your course in LearningStudio and click on the bell-shaped Notifications icon on the main menu ribbon.

By default the student's university email address will appear. This cannot be changed in LearningStudio. Additional email addresses may be added by clicking the Add button. After all of the other selections are completed be sure to click the Save and Finish button.

# COMMUNICATION AND SUPPORT

## Interaction with Instructor Statement

The best method to reach the instructor is through email. There is an email link in eCollege, or you can send an email to [robynnelock@tamuc.edu](mailto:robynnelock@tamuc.edu) with PHYS 530 in the subject line.

The instructor will also be available through the virtual office for general questions.

The instructor will hold office hours on AdobeConnect or Skype. When office hours are held through AdobeConnect, the URL will be posted in class announcements. When office hours are held on Skype, you can find the instructor by the username robynnelock. The method for office hours will be posted in class announcements a week in advance.

The instructor will participate on class discussion boards. Please restrict these discussion boards to their labeled topics.

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

### Course Specific Procedures

1. Cell phone use is not allowed during class unless used for class activities. **If you have a valid reason you need to receive a phone call during class** (expecting a phone call from doctors, etc.), you must **notify the instructor by the beginning of class**.
2. **Eating is not allowed**. However, covered drinks are allowed.
3. Attendance will be taken by seating chart at the beginning of class.
4. The instructor must be notified by email ([robynnelock@tamuc.edu](mailto:robynnelock@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 not be able to make up a missed exam or other late work.
5. You are responsible for obtaining notes and class announcements from missed classes.
6. Excessive absences may result in being dropped from the course.
7. When emailing the instructor, include the **course and section number in the subject line**.
9. 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.

10. Homework is due at the beginning of class and will be counted late after class starts.
11. Students should fully participate in class activities.
12. 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**

### **Students with Disabilities**

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:

Student Disability Resources & Services

Texas A&M University-Commerce

Gee Library, Room 162

Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

[StudentDisabilityServices@tamuc.edu](mailto:StudentDisabilityServices@tamuc.edu)

### **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*).

### **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.

## **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.

## **Plagiarism**

Plagiarism is a criminal activity. You must cite all sources of information. Unreferenced copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles can result in a score of zero for your assignment and may result in further disciplinary action.

## **Harassment Policy**

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here:

University Title IX Contact: Michele Vieira, 903-886-5025, <mailto:TitleIX@tamuc.edu>

University resource webpages:

<http://www.tamuc.edu/facultyStaffServices/humanResources/title-ix/resources.aspx>

<http://www.tamuc.edu/campuslife/campusServices/universityPoliceDepartment/crimePrevention/sexualAssault.aspx>

University Counseling Center: 903-886-5145,

<http://www.tamuc.edu/campusLife/campusServices/counselingCenter/default.aspx>

Campus police: <mailto:upd@tamuc.edu>, call 911 in emergency situations

External resources:

Crisis center of NorthEast Texas: <http://www.ccnetx.org>

Know your IX: <http://knowyourix.org>

End rape on campus: <http://endrapeoncampus.org>

Clery Center for Security on Campus: <http://clerycenter.org>

Not Alone: <https://www.notalone.gov>

## **COURSE OUTLINE / CALENDAR**

### **Content schedule**

Weeks 1-5     Developing a model for static electricity

Weeks 6-10   Physical changes

Weeks 11-15   Chemical reactions

### **Exam dates**

Exam 1        Tues., 2/20

Exam 2        Tues., 3/27

Final Exam    Thursday, 5/10, 10:30-12:30

Exam dates are tentative and may be adjusted depending on the pace at which we cover material.