



## INTEGRATED SCIENCE 1315 COURSE SYLLABUS: SPRING I 2021

### INSTRUCTOR INFORMATION

**Instructor:** Molly Jacobsen, MS | Adjunct Instructor  
**Office Location:** No Office on Campus  
**Office Hours:** Thursday Evenings (7:00-10:00 P.M.)  
**Office Phone:** 903.468.3318 (Advising Main Office)  
**Office Fax:** 903.468.3323  
**University Email Address:** Molly.Jacobsen@tamuc.edu  
**Preferred Form of Communication:** exclusively e-mail  
**Communication Response Time:** Check e-mail every 24 hours.

### COURSE INFORMATION

#### Materials – Textbooks/Readings

Good news: your textbook for this class is available for free online! If you prefer, you can also get a print version at a very low cost.

Your book is available in web view and PDF for free. You can also choose to purchase on iBooks or get a print version via OpenStax on Amazon.com.

You can use whichever format you prefer. Web view is recommended -- the responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org ("Order a print copy") so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

<https://openstax.org/details/books/biology-2e>

Print ISBN 1938168097, Digital ISBN 1947172026

<https://openstax.org/details/books/astronomy>

Print ISBN 1938168283, Digital ISBN 1947172247

<https://openstax.org/details/books/chemistry>

Print ISBN 1938168399, Digital ISBN 1947172093

<https://openstax.org/details/books/introductory-statistics>

Print ISBN 1938168208, Digital ISBN 1947172050

## Course Description

Integrated Science is a General Education, Life and Physical Science requirement of the Organizational Leadership Degree Program. Scientific principles developed in the course include Applied Sciences, Chemistry, Physics and physical sciences. Students will explore the integration of these science disciplines, learn about the fundamental basics of chemistry and how it applies to the sciences, and how physics serves as the basis for the other science disciplines. Students will also be introduced to the scientific method, basic statistics, and the fundamental unit of all living things: the cell.

## Student Learning Outcomes

### Competency 1 (Applied Sciences):

1. Students should understand the broad application of the science disciplines and be able to apply Science to their daily lives.
2. Students will be able to explain and apply the Scientific Method while also being able to interpret results of scientific investigations and draw reasonable conclusions from data they are presented with.
3. Students will consider the characteristics that constitute life and understand the levels of organization at the biological level.
4. Students will be introduced to basic statistics and look at size and scale with the intent of putting things into perspective and drawing logical conclusions from statistical data when analyzing the data from scientific research.

### Competency 2 (Physics):

1. Students will demonstrate the ability to think critically and to use appropriate concepts to analyze both quantitative and qualitative problems which entail fundamental principles of basic physics.
2. Students will demonstrate knowledge of classical mechanics by learning and applying Newton's Laws of Motions.
3. Students will demonstrate knowledge of fluid dynamics by explaining and applying principles of fluid mechanics and Bernoulli's principle.
4. Students will learn to comprehend thermodynamics and apply those principles accordingly to real life scenarios.
5. Students will understand basic circuitry, the nature of electrical charges, and apply it to their daily lives.

### Competency 3 (Chemistry)

1. Students will be introduced to the general principles, laws and theories of Chemistry.
2. Students will be able to differentiate between elements and mixtures, homogeneous and heterogeneous mixtures, and chemical and physical changes.
3. Students will be introduced to the Periodic Table and understand its parts, purpose and organization.
4. Students will be able to apply learned chemistry skills to their everyday lives.

# **COURSE REQUIREMENTS**

## **Minimal Technical Skills Needed**

Students will need a reliable computer and internet access for this course. Specific capabilities of the computer are discussed later in the syllabus. Students are required to demonstrate proficiency in myLeo navigation in order to participate in this course. Fluency in programs like Microsoft Word, Power point and Excel may further contribute to student success in this course.

## **Instructional Methods**

This course is 100% online. As such, communication and assignment submission is all done electronically. Please do not ask the instructor to call you.

Power points, resources, assignments and tests are all located within the online course. Should you have trouble finding anything, please e-mail the instructor to point you in the right direction. While not all discussions and assignments are required, students are encouraged to participate in all activities. There are optional YouTube Videos associated with all reading assignments. These are intended to assist visual learners in comprehension. Should you find yourself struggling with assignments in the course, please watch videos and complete all reading before e-mailing the instructor to ask for further assistance in comprehending certain subject matter. It is unacceptable to not participate in assignments/discussions etc. and then claim the material was too difficult to comprehend. Your participation will directly affect your success in the course. The more hours you spend in the course utilizing provided resources, the more likely you are to succeed in the course.

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

Students are encouraged to log-in to the course every 24 hours. While not required, students are encouraged to complete an entire competency every 2 weeks. This means by week 6 of the 7-week semester, they have attempted to test out of all 3 competencies. This allows the student sufficient time to re-do any failed competency posttests.

Students are encouraged to e-mail the professor as they encounter concepts that after reading and utilizing course resources (supplemental documents, Youtube videos, etc.), still do not understand. Students are encouraged to engage other classmates in discussions or thoughts that pertain to course material. Regular participation and engagement ensures the best chance at successful completion of the course.

## GRADING

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

A = 90%-100%

B = 80%-89%

F = 79% or below

**\*Organizational Leadership Students are required to test out of EACH Competency with a grade of 80% or higher. This is NOT a cumulative average amongst the 3 competencies, but an individual grade of 80% or higher for EACH of the three Competencies.**

### Assessments

Competency	<u>Reading</u>	<u>Pre-test</u>	<u>Post-test</u>	<u>Assignment/ Discussion</u>
Applied Science	Recommended	Required	Required*	Required*
Physics	Recommended	Required	Required*	Recommended
Chemistry	Recommended	Required	Required*	Recommended

**\*included in student's final grade**

**The student's final grade will be comprised of 3 post test scores from each of the 3 competencies and the discussion, listed in your menu bar beneath the 3 Competencies. Students should participate in the discussion within the first 3 weeks of the course.**

## TECHNOLOGY REQUIREMENTS

### Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

### Desktop Support

<b>Browser</b>	<b>Supported Browser Version(s)</b>	<b>Maintenance Browser Version(s)</b>
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

## Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.  Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - o 512 MB of RAM, 1 GB or more preferred
  - o Broadband connection required courses are heavily video intensive
  - o Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
  
- You must have a:
  - o Sound card, which is usually integrated into your desktop or laptop computer
  - o Speakers or headphones.
  - o 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>

- Current anti-virus software must be installed and kept up to date.

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/>

- Adobe Flash Player (*version 17 or later*)

- <https://get.adobe.com/flashplayer/>

- Adobe Shockwave Player <https://get.adobe.com/shockwave/>

- Apple Quick Time <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.

## 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.

## COMMUNICATION AND SUPPORT

### Brightspace Support

#### Need Help?

#### Student 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 or click on the **Live Chat** or click on the words “click here” to submit an issue via email.



## System Maintenance

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

## Expectations for Interaction with Instructor:

Primary communication will be through e-mail and announcements made in the course. Please read every e-mail I send completely.

Tests will be graded within 48-72 hours. Students should e-mail me after submitting any work that needs to be graded. I check my e-mail every 24-48 hours.

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

### Course Specific Expectations/Procedures:

Participation from students regularly is encouraged. There will be optional discussions, and assignments that are not required. Students are encouraged to participate as regular exposure to course content will result in a better chance at successful completion of the course. The only required assignments in this course are the pre-tests for each Competency (there are 3 competencies which means 3 pre-tests). While pre-tests are required to pass the course, the grade does not count toward your final grade. A grade of 80% or higher is required to test out of each of the 3 competencies. You have 3 attempts to achieve a grade of 80% or higher in each of the 3 competencies. Aside from the tests, there is one mandatory discussion that each student is required to participate in.

### 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: Netiquette

<http://www.albion.com/netiquette/corerules.html>

## **TAMUC 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.R0.10.pdf>

## **ADA Statement**

### **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:

### **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** **FALL 2020 Semesters:**

#### **SPRING I 2021**

**January 11, 2021 – February 26, 2021**

**(deadline for coursework submission is 5:00 p.m. on February 26<sup>th</sup>)**

**\*\*While there are no designated due dates for pre and posttest submissions- students are encouraged to complete (1) Competency every 2 weeks.\*\***