Course Description

Interdisciplinary course focusing on basic concepts of physical science, including structure of matter and magnitude and character of the forces of nature. Demonstrates role of modeling, prediction, and observation in the process of scientific discovery, which occurs within an historical and social context. This course attempts to relate the atomic composition and structure of materials to the observed microscopic and macroscopic properties that influence our world. More emphasis is placed on the pragmatic engineering approach of some fields to discuss how different materials can and should be used differently in construction. Further discussion introduces the factors of energy interacting with matter - ranging from the nature of light to the impact of heat transfer on the planetary scale of Earth. The origin of elements in our universe is also discussed along with the ill defined character of dark energy and dark matter.

Material topics include:
- carbon allotropes
- glass & ceramics / inorganic minerals
- macro scale inorganics / plate tectonics
- energy and matter interactions
- concrete ... and composite materials
- wood, engineered wood products, paper
- chocolate

Historical examples provide a fascinating backdrop for the discussion of how we use materials and what drives the changing needs of society.

Required Text


Fees

There is no additional fee for this course.

Course Objectives

By the end of this course, you will be able to:

1. Objective
2. Objective
3. Objective

Instructor

Mark D. Noirot, Ph.D.
mark.noirot@usu.edu
office 435-678-8193
Location: USU Blanding, BLT 111
Class Scheduled meetings:

Course Resources

Textbook: Stuff Matters by Mark Miodownik

Course Requirements

Each student will:

1. Access the Course through CANVAS
2. Take exams and complete homework quiz assignments through the CANVAS LMS portal.
   1. Exams can be taken using Proctorio software to monitor ... or
   2. Exams can be taken at USU approved Proctored Testing Centers.

Evaluation Methods and Criteria
Canvas Information

Canvas is the where course content, grades, and communication will reside for this course.

- [http://canvas.usu.edu](http://canvas.usu.edu)
- Your username is your A#, and your password is your global password (the same one you use for Banner or Aggiemail).

For [Canvas](http://canvas.usu.edu)/Passwords ([https://it.usu.edu/Password/Help/#password](https://it.usu.edu/Password/Help/#password)), or any other computer-related technical support contact the [IT Service Desk](http://it.usu.edu/).
- 435 797-4357 (797-HELP)
- 877 878-8325
- [http://it.usu.edu](http://it.usu.edu)/servicedesk@usu.edu

Grade Scheme

The following grading standards will be used in this class:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>100 % to 93.0%</td>
</tr>
<tr>
<td>A-</td>
<td>&lt; 93.0 % to 90.0%</td>
</tr>
<tr>
<td>B+</td>
<td>&lt; 90.0 % to 87.0%</td>
</tr>
<tr>
<td>B</td>
<td>&lt; 87.0 % to 83.0%</td>
</tr>
<tr>
<td>B-</td>
<td>&lt; 83.0 % to 80.0%</td>
</tr>
<tr>
<td>C+</td>
<td>&lt; 80.0 % to 77.0%</td>
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<tr>
<td>C</td>
<td>&lt; 77.0 % to 73.0%</td>
</tr>
<tr>
<td>C-</td>
<td>&lt; 73.0 % to 70.0%</td>
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<tr>
<td>D+</td>
<td>&lt; 70.0 % to 67.0%</td>
</tr>
<tr>
<td>D</td>
<td>&lt; 67.0 % to 60.0%</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 59.0 % to 0.0%</td>
</tr>
</tbody>
</table>

Course Schedule/Outline

Outline dates and assignments

Attendance and Excused Absences Policy

Under construction here - likely to change...

Nonattendance Policy

Students May Be Dropped For Nonattendance

If a student does not attend a class during the first week of the term or by the second class meeting, whichever comes first, the instructor may submit a request to have the student dropped from the course. **(This does not remove responsibility from the student to drop courses which he or she does not plan to attend.)** This option is typically used for classes that are full and the instructor is trying to make a seat available for another student, but may be considered for other courses. Requests must be made during the first 20 percent of the course and will be considered on an individual student basis.

Students who are dropped from courses will be notified by the Registrar's Office through their preferred e-mail account (see [2018-2019 General Catalog](http://catalog.usu.edu/content.php?catoid=12&navoid=3955)).

Assumption of Risk

All classes, programs, and extracurricular activities within the University involve some risk, and certain ones involve travel. The University provides opportunities to participate in these programs on a voluntary basis. Therefore, students should not participate in them if they do not care to assume the risks. Students can ask the respective program leaders/sponsors about the possible risks a program may generate, and if students are not willing to assume the risks, they should not select that program. By voluntarily participating in classes, programs, and extracurricular activities, a student does so at his or her own risk. General information about University Risk Management policies, insurance coverage, vehicle use policies, and risk management forms can be found at [http://www.usu.edu/riskmgt/](http://www.usu.edu/riskmgt/).

Library Services

All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at [http://guides.usu.edu/rc](http://guides.usu.edu/rc).

Classroom Civility
Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read Student Code Article V Section V-3 for more information.

University Policies & Procedures

COVID-19 Classroom Accommodations

If you face COVID-19 related challenges and feel you need accommodations, you must request those accommodations by filling out the COVID-19 Questionnaire. Upon doing so, the University COVID CARE Team will contact you to determine your needs and how you support. The CARE Team will also contact your instructors and provide important direction on how best to accommodate your needs. For additional reference, see USU's Attendance and Excused Absence and the COVID-19 Classroom Accommodations.

Reducing COVID-19 Risk

You can help keep classes, events, and activities happening in person this semester by following these steps:

1. Get vaccinated if you’re able. Vaccines are the best available tool to help stop the spread of COVID-19. They are safe, free, and easy to access.
2. If you are vaccinated, let USU know. Please upload your proof of full vaccination to AggieHealth. If you are exposed to COVID-19, USU’s case containment will not require you to quarantine if you know you are vaccinated and you do not have symptoms.
3. Stay home if you’re sick and not tested for COVID-19 if you have symptoms or have been exposed. It’s important to not bring any illness to campus.
4. Wear a mask indoors. Public health experts recommend that even vaccinated people wear masks indoors in high COVID-19 transmission areas, which includes most of Utah.

If USU’s COVID Care Containment team identifies an uncontested situation in the classroom, you will be notified of any temporary changes to your course delivery method through a Canvas announcement. Please make sure you are receiving immediate notifications of new Canvas announcements.

Class Seating Charts (For In-Person Classes)

In classes with more than 10 students, a seating chart will be used to track where you are sitting. After the first week of classes, your instructor will tell you how to enter your seat number in Canvas. You must sit in the same seat for the rest of the semester. This is extremely important for tracking cases of COVID-19 and helping classes remain in person.

Academic Freedom and Professional Responsibilities

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility.

Academic Integrity – "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

* I pledge, on my honor, to conduct myself with the foremost level of academic integrity.
* I understand that each act of academic dishonesty devalues every degree that is awarded by this institution;
* I espouses academic integrity as an underlying and essential principle of the Utah State University community;
* I understand that each act of academic dishonesty devalues every degree that is awarded by this institution; and
* I am a welcomed and valued member of Utah State University.

Academic Dishonesty

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined by the University’s Student Code. Acts of academic dishonesty include but are not limited to:

- Cheating: using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done "individually;"
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
  - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
  - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
  - Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor, or engaging in any form of research fraud.

- Falsification: altering or fabricating any information or citation in an academic exercise or activity.

- Plagiarism: representing, by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

For additional information go to ARTICLE VI. University Regulations Regarding Academic Integrity.
Welcome to USU-1360-AB1 XL Syllabus for Fall 2021

Course Summary:

**Course Title:** USU-1360-AB1 XL

**Date:** 9/6/21

**Details:**

- **Course Summary:**
  - Course is designed to address emotional crises, bullying, relationship problems, mental health, or suicide-related issues.
  - The course provides guidance and resources for students to navigate these challenges.

**Course Goals:**

1. **SafeUT Application:**
   - 24/7 statewide crisis text and tip service.
   - Provides real-time crisis intervention through texting.
   - Confidential and available to students.

2. **Mental Health Services:**
   - Available on campus at University for free.
   - Supports students with a broad range of mental health concerns.

3. **Diversity and Inclusion:**
   - Promotes an inclusive environment.
   - Addresses issues related to ethnicity, gender, or sexual orientation.

4. **Disability Services:**
   - Supports students with disabilities.
   - Provides accommodations in the course.

5. **Academic Integrity:**
   - Emphasizes honesty and academic honesty.

6. **Emergency Procedures:**
   - Key safety measures.
   - Detailed procedures for fire and medical emergencies.

**Withdrawal Policy and "I" Grade Policy:**

- Students are required to complete all courses in the semester. In cases of extenuating circumstances, withdrawal or "I" grade can be considered.

**Academic Policies:**

- Full details available in the Student Code (https://studentconduct.usu.edu/studentcode/)

**Diversity Statement:**

- Essential for creating an inclusive environment.
- Addresses issues of diversity and inclusion.

**Course Details:**

- **Mental Health Concerns:**
  - Strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating, and lack of motivation.

**Withdrawal Policy:**

- Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

**Terms and Conditions:**

- **Academic Policies and Procedures:** Full details available at https://studentconduct.usu.edu/studentcode/

**Student Conduct:**

- **Disability Resource Center (DRC):**
  - Provides accommodations.

**Access and Diversity:**

- **LGBTQA Programs:**
  - Offers resources and support for LGBTQ+ students.

**Equity:**

- **Office of Equity:**
  - Responds to complaints of sexual misconduct and discrimination.

**Emergency Procedures:**

- **In the event of a disaster:**
  - Follow notification procedures.
  - Use designated evacuation routes.

**Mental Health:**

- Mental health is critical; resources and support are available.

**Course Evaluation:**

- Students are encouraged to provide feedback.

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**Course URL:** https://usu.instructure.com/courses/676154/assignments/syllabus
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<thead>
<tr>
<th>Date</th>
<th>Details</th>
<th>Due</th>
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<td>Sat Jun 6, 2020</td>
<td>Expansion Universe</td>
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</tr>
<tr>
<td>Fri Jan 22, 2021</td>
<td>The Big Bang Nucleosynthesis (BBN) produced mostly Hydrogen and Helium</td>
<td>due by 10:59pm</td>
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<td>Sun Jan 24, 2021</td>
<td>Discussion: Light - Perception - Color</td>
<td>due by 11:59pm</td>
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<td>Mon Feb 1, 2021</td>
<td>Nucleosynthesis II [Quiz 2]</td>
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<td>USU 1360 Exam 2 FL15</td>
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<td>Mon Mar 22, 2021</td>
<td>Dis: New Composite Ideas</td>
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<td>Momentum Quiz</td>
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<td>Project 3 Assessment</td>
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<td>Wed May 12, 2021</td>
<td>USU 1360 Exam 4 FL15</td>
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<td>Fri May 14, 2021</td>
<td>Fundamental Wood Structures</td>
<td>due by 11:59pm</td>
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<td>Sun Sep 5, 2021</td>
<td>USU 1360 Carbon Quiz</td>
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<td>Fri Sep 10, 2021</td>
<td>Chapter 8 - Unbreakable - text</td>
<td>due by 11:59pm</td>
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<td>Sun Sep 19, 2021</td>
<td>Dis: Carbon and Carbon Materials</td>
<td>due by 11:59pm</td>
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<td>Fri Sep 24, 2021</td>
<td>Chapter 3 - Fundamental - text</td>
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<td>Fri Oct 1, 2021</td>
<td>Chapter 7 - Infrared - text</td>
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<td>Sat Oct 2, 2021</td>
<td>Earth Materials Quiz</td>
<td>due by 5pm</td>
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<td>Mon Oct 4, 2021</td>
<td>USU 1360 Exam Carbon and Earth Materials</td>
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<td>Glass - The transparent material</td>
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<td>Sat Oct 16, 2021</td>
<td>Heat Transfer Quiz</td>
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<td>Thu Oct 28, 2021</td>
<td>Exam 2 CH 4.5 E-8</td>
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<td>USU 1360 Exam 2 Geo plus</td>
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<td>Fri Nov 12, 2021</td>
<td>RadioLab Quiz</td>
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<td>Roll Call Attendance (<a href="https://usu.instructure.com/courses/676154/assignments/3417519">https://usu.instructure.com/courses/676154/assignments/3417519</a>)</td>
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<td>Science Conceptions (<a href="https://usu.instructure.com/courses/676154/assignments/3417489">https://usu.instructure.com/courses/676154/assignments/3417489</a>)</td>
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