

# Physics 101: Physical Science

## Phy-101

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### *Student Help Hours*

Google Meet student help hours are made by appointment and can be scheduled by email, through Google Calendar, or by phone. Using the Google Calendar App, find my listed *Student Help Hours* and request 1 or more 15 minute periods.

If none of my listed student help hours are convenient for you, email me so we can set up a mutually convenient time.

### **Required Materials:**

- Reliable computer
- Reliable internet connection
- Blackboard
  - coker.blackboard.com
- *Physical Science, 12<sup>th</sup> Ed.* by Bill Tillery
  - ISBN10: 1260150542
  - Digital access **required** through McGraw-Hill Connect
  - You can access digital version of the text through RedShelf
  - Instructions for access will be posted the first week of class
- *A Short History of Nearly Everything* by Bill Bryson
  - ISBN10: 076790818X
  - print, ebook, or audio format all acceptable

### **Course Content**

Deeply engrained in our culture, science impacts on our daily lives and the way we think about our world more than ever. The media actively promotes the latest popular advances, and movies, TV, and music regularly reference STEM (Science, Technology, Engineering, and Mathematics) topics.

To engage with all of this science, we need to have a shared understanding of foundational principles of our natural world. Civic scientific literacy means knowing how to approach questions of curiosity about the natural world. It also means having the ability to reasonably assess scientific news and claims. This course introduces foundational outcomes of science so you know where to start. In this course, emphasis is often on *what* we know and only occasionally on *how* we know it.

Science only works if it is universal; science is not different between borders, cultures, classes, times, etc. This course is designed to address Coker University's **Engaged Learning Contribution Pillar**. As we cover each topic, reflect on how science, and so civic scientific literacy, are the same for all peoples everywhere.

Physical science covers foundational quantitative and qualitative applications of natural principles, exercising our arithmetic and algebra in the process. Further, scientific literacy is veiled by field-specific jargon. Basic vocabulary for physics, chemistry, geology, and atmospheric science will be developed.

Topics covered include:

- basics of Newtonian motion,
- introduction to energy,
- the composition of atoms,
- chemical bonds and molecules,
- introduction to geology,
- minerals and rocks,
- tectonic forces,
- and an introduction to atmospheric sciences.

A week-by-weeks schedule of topics covered will be posted. The schedule is tentative and somewhat flexible. Significant changes will be addressed with a revised syllabus.

## Student Evaluation

Most of the grade for this class will be through the weekly homework. To encourage information retention, there will be a midterm and final.

Graded Item	Points Each	Anticipated Number	Total
Discussions	15	8	120
Smart Book Reading	10	8	80
Homework	50	8	400
Midterm	100	1	100
Comprehensive Final	100	1	100
Total			800

### *Discussions*

Each week, a discussion prompt will be posted to Blackboard based on Bill Bryson's *A Short History of Everything*. To earn points, a meaningful contribution must be made. Students may be required to respond both to the prompt and to at least one other student. Grading is based on content, grammar, and professionalism.

### *Smart Book Reading*

The Smart Book digital version of your textbook gives you the necessary foundation to learn and understand important concepts that you will need to apply to successfully complete the homework. Completing the Smart Book readings online earns you up to 10 points, based on the percentage of the assigned reading you complete.

### *Homework*

There will be an assigned homework for each chapter in the courseware.

### *Midterm Exam*

This exam will cover concepts in physics and chemistry.

### *Comprehensive Final*

There will be a comprehensive final at the end of the semester.

### *Late work*

Assignments and exams will be structured to allow for adequate time for completion around a variety of schedules. Late work will not be accepted and missed exams cannot be completed.

In the event of a documented emergency or technical problem, let me know as soon as possible. If enough course content is missed due to complications, arrangements can be made to withdraw or earn an incomplete in the course for the semester.

The course outline is tentative and total points are subject to slight changes. Any significant changes will be addressed with a new syllabus.

### *Grade Assignment*

At the end of the semester you will be assigned a letter grade based on the typical scale:

A	$\geq 90\%$
B	$80\% \leq B < 90\%$
C	$70\% \leq C < 80\%$
D	$60\% \leq D < 70\%$
F	$\leq 59.9\%$

## **Title IX and Reporting of Discrimination and Sexual Harassment**

Coker University values and requires equal access to educational experiences. Federal Title IX legislation prohibits discrimination on the basis of sex in educational programs or activities, admission, and employment.

### *Coker's Commitment to Equality*

Equal access to educational experiences is an important part of the Coker experience. If you feel you have been discriminated against based on your sex, gender, gender identity/expression, or sexual orientation, or if you have experienced sexual harassment,

misconduct, or violence, we encourage you to report this to a member of the Coker Community.

### *What is Sexual Harassment?*

Sexual harassment is unwelcome conduct of a sexual nature, including unwelcome sexual advances and requests for sexual favors. Sexual violence is a form of sexual harassment and includes sexual assault, dating violence, domestic violence, rape, sexual battery, sexual coercion, and sexual exploitation.

### *Who Can I Talk To?*

While faculty and staff are happy to listen to your concerns, please be mindful of how much you wish to disclose since all Coker faculty and staff members are 'mandatory reporters.' This means that if they are made aware of potential discrimination, harassment, misconduct, or violence that has occurred involving any Coker student, staff, or faculty member, they are required by law to report it to Coker's Title IX Officer. This includes incidents that occur on campus or at an off-campus Coker-sponsored event or activity in the recent present or in the past. Of course, you may also contact Coker University's Title IX Coordinator:

Michael Williamson  
(843)383-8194  
mwilliamson@coker.edu

At any time that you fear for your immediate safety, contact Campus Safety (843-383-8140) or dial 911.

Additional information is located under the Title IX section on the Coker website:

<https://www.coker.edu/about-coker/offices-services/campus-safety/title-ix/>.

### **Coker University is committed to inclusivity.**

Inclusivity is a demonstration of equity and social justice through awareness, understanding, and respect for the differences in identity, culture, background, experience, and socialization, and the ways in which these forms of difference impact how we live and learn. Inclusivity requires equitable, institution-wide representation and access to resources. In practice, this manifests itself by each individual being aware of, committed to, and responsible for the well-being of all students, staff, and faculty. This is the responsibility of all members of our community, including faculty, staff, and students.

### **Accommodations**

If you require accommodations, contact Robin Richardson in the Learning Support Services Office at (843)383-8021 or rrichardson@coker.edu. No accommodations can be made without documentation from Learning Support Services. Contact Learning Support Services promptly; accommodations cannot be made retroactively.

## **Academic Integrity**

Education and scholastic activity are built upon academic honesty and integrity. Any student presenting work that was not produced by that student is regarded by the faculty and administration as a serious offense. Academic dishonesty includes, but is not limited to, copying work from another student during any assignment or exam, allowing another student to copy during any assignment or exam, turning in any work completed by someone else, and using unauthorized materials during an exam. Students are held accountable for plagiarism, intentional or otherwise. Sources must be properly cited. Identical phrasing in short-answer problem for any individual assignment (i.e. work not turned in as a group) constitutes plagiarism.

The perception and/or suspicion of an academic integrity violation will be treated like an academic integrity violation. Students responsible for or assisting in any violation of academic integrity will be referred to the Dean of Faculty. For further clarification on cheating and plagiarism policies of Coker University, and to know your rights and the process if accused, consult the student handbook.

## **Wellness and Counseling**

In addition to a partnership with Carolina Pines Regional Medical Center, Coker University students have access to healthcare professionals at the Center for Health & Wellness, located at 212 S 2<sup>nd</sup> St, Suite 212, Hartsville, SC, 29550 (behind DeLoach).

Coker University has partnered with MUSC TelePsych to provide students access to licensed mental health professionals, including psychiatrists.

You can contact the clinic at 843-383-8141 or [healthservices@coker.edu](mailto:healthservices@coker.edu) for questions or appointments.

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