



## Science of Our World

MASC150 [all sections]

Southwestern College Professional Studies

## COURSE SYLLABUS

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### I. Course Catalog Description

Science is an integral component of our technologically-advanced world. Because science affects many facets of everyday life, including business, politics, civics society, and popular culture, it is important that non-scientists are able to understand, evaluate, and analyze scientific issues. This introductory science course is designed to familiarize learners of all majors with the methods of rational inquiry and problem solving in the sciences, help them become more scientifically literate, while integrated lab component helps bring science to life.

### II. Required and Supplementary Instructional Materials

Hewitt, P. G. Lyons, S. A., Suchocki, J. A., & J. Yeh. (2013). *Conceptual Integrated Science*. (2nd ed.). San Francisco: Addison-Wesley.

In addition to this textbook, learners are required to purchase lab materials using the instructions below:

1. Go to [www.holscience.com](http://www.holscience.com)
2. Select "Orders" link
3. Click the "Order Here" icon
4. Login: C006293
5. Password: labpaq
6. Select LP-0258-SM-01 and complete the ordering instructions.

### III. Course Delivery

There are two forms of course delivery Ground and Online:

Ground courses, or those that meet face-to-face on a weekly basis, also have an online component, which means some of the course content is delivered online. Southwestern College utilizes the Blackboard (Bb) learning management system.

Online courses typically contain a blend of synchronous (real-time) and asynchronous (not real-time) material. Depending on the course, you may be required at times to interact "live," which might mean attending a scheduled Collaborate session. You may also be required to view or listen to a lecture or other video on a specific date and time. Of course, if there are circumstances that prohibit you from logging in to a scheduled synchronous activity, an alternate assignment will be provided. Please refer to the [Course at a Glance](#) section which will note any synchronous activities.

### IV. Learning Outcomes

Learning outcomes describe the knowledge, skills, values, and attitudes that learners gain as the result of a particular learning experience. Southwestern College Professional Studies has learning outcomes specific to each course and each [undergraduate](#) and [graduate](#) program of study, as well as [institution-wide outcomes](#) related to the mission and vision of the college. Outcomes can help learners and instructors focus on the big picture of the learning experience and can help inform potential employers about a graduate's knowledge and skills.

Upon successfully completing this course, the learner will be able to:

1. Apply the scientific method to assess natural occurrences.

2. Discuss scientific topics in the natural sciences (biology, chemistry, earth-space science, and physics) clearly and concisely and explain the importance of being scientifically literate.
3. Conduct hands-on experiments to analyze current events, issues, and experiences using scientific principles and concepts.
4. Apply problem-solving techniques to identify possible solutions to current environmental, social, or political problems relating to the natural sciences.
5. Retrieve and organize scientific data from various sources including computerized databases, reference books, and periodicals.
6. Express specific positions and ideas about issues related to the natural sciences.
7. Locate and use tools, instruments, and other technological resources to collect and analyze data from hands on experiments.

At the end of the course, learners may vary in their ability to achieve these outcomes. You are more likely to achieve these outcomes only if you attend class and/or online activities as required by the syllabus, complete the requirements for all assignments to the best of your ability, participate actively in class activities and group work as directed, and study diligently for exams.

#### V. Expectations

Learners can expect the instructor to:

- Respond to e-mail and phone contact attempts promptly (if you do not receive a response after 48 hours please follow-up as a technology glitch may have occurred)
- Substantially participate in weekly discussions/lecture
- Employ impartial and consistent grading practices
- Provide assignment grades and feedback in one week or less

Instructors can expect the learner to:

- Review the syllabus in its entirety requesting clarification prior to beginning week 1 coursework
- Obtain access to the required course materials prior to the class start date or notify the instructor of any delay no later than Tuesday of week 1 of the course
- Submit course assignment questions with enough notice to receive and incorporate feedback prior to the assignment due date (see [course late policy](#))
- Possess basic skills in Microsoft Office, and have the ability to access Blackboard
- Include the [course ID](#) (Ex: CORE101) on all e-mail correspondence
- Check Blackboard course announcements often during the course
- Communicate with instructors and classmates in a professional and respectful manner
- Substantially participate in weekly discussion/lecture (it is strongly suggested that Bb posts be prepared in a word processing software application then checked for grammar errors prior to submission)
- Submit assignments via the appropriate avenue (e.g. discussion board, Bb assignment link, etc.)
- Adhere to the Southwestern College [Student Code of Conduct](#) and [Standards of Academic Integrity](#)
- Create and submit original work

#### VI. Grading Scale and Criteria

<u>Grade</u>	<u>Quality Points</u>	<u>Course Scale</u>
A+	4.00	100%
A	4.00	94.0-99.9%
A-	3.67	90.0-93.9%
B+	3.33	87.0-89.9%
B	3.00	84.0-86.9%
B-	2.67	80.0-83.9%
C+	2.33	77.0-79.9%

<u>Grade</u>	<u>Quality Points</u>	<u>Course Scale</u>
C	2.00	74.0-76.9%
C-	1.67	70.0-73.9%
D+	1.33	67.0-69.9%
D	1.00	64.0-66.9%
D-	0.67	60.0-63.9%
F	0.00	< 60.0%

<u>Grade:</u>	<u>Criteria and Guidelines:</u>
A+	The grade of A+ is reserved for a perfect score (100%) of all work in a course.
A	Superior work: Superior performance that far exceeds the minimum expectations and demonstrates an excellent understanding of the concepts addressed in the course.
B	Above average work: Good performance that exceeds the minimum expectations and demonstrates a higher than average understanding of the concepts addressed in the course.
C	Average Work: Adequate performance that meets the minimal expectations and demonstrates a basic understanding of the concepts addressed in the course.
D	Minimally acceptable work for receiving credit: Below average performance that does not meet the minimum expectations and/or does not demonstrate a basic understanding of the concepts addressed in the course.
F	Failure: Unacceptable performance (in a professional context, this means "you're fired.")
WF	Withdraw/Fail: A final grade of WF will be recorded for learners who either never access/attend or submit any assignments for courses.
WD, AW, I, S, W, WM	Please refer to the <a href="#">Grading System</a> section of the appropriate catalog.

## VII. College Policies

Students are expected to read and abide by the college policies as listed in the appropriate catalog:

- [Undergraduate Catalog](#): For learners who do not possess a bachelor's degree, are pursuing an additional bachelor's degree or for graduate learners who are enrolled in 100-400 level courses.
- [Graduate Catalog](#): For learners who have earned a bachelor's degree and are pursuing a master's degree or graduate level certificate or learners who are enrolled in 500+ level courses.

[Non-Discrimination Policy](#)

[Student Code of Conduct](#)

[Academic Integrity Policy](#)

[Policies for Dealing with Violations of Academic Integrity](#)

[Incomplete Policy](#)

[Withdraw Policy](#)

## VIII. Course Policies

Students are expected to read and abide by the course policies located in the instructor-specific syllabus in the Blackboard course.

## IX. [Technology Requirements](#)

## X. APA Citation

Southwestern College Professional Studies utilizes the guidelines prescribed by the American Psychological Association (APA), sixth edition (2009) for formatting manuscripts and documenting various kinds of sources when submitting written work. APA resources are provided in the Online Writing Center

(see [College Resources](#)).

**XI. SafeAssign®**

This instructor may use SafeAssign®, which is a system that allows for checking the originality of writing and proper APA citing. Your assignments may be run through this software.

**XII. Course Requirements:**

Requirements	Number of Assignments	Points Possible	Percent of Grade
Discussion Boards	5	250	25
Essay Assessment Question/PowerPoint Assignment	5	250	25
Labs with Reports	5	300	30
Final Essay Questions	1	100	10
Final Science Project	1	100	10
<b>Total Points</b>		<b>1000</b>	<b>100</b>

**XIII. Course at a Glance:**

Unit	Reading & Preparation Activities	Graded Work Due
1	<ul style="list-style-type: none"> <li>○ View recorded lecture notes covering on chapters 1-8</li> <li>○ Read Ancestors of E = mc<sup>2</sup></li> <li>○ Read <i>Conceptual Integrated Sciences</i>, pp. 20, 21, 47, 62, 178 - 206</li> <li>○ Read The Scientific Method</li> <li>○ View Einstein's Big Idea and the following Minute Physics videos: What is Gravity?, What is wave particle duality?, and The speed of light in glass</li> <li>○ Read the Science Methods LabPaq manual, pp. 2-4, 6-12</li> </ul>	<ol style="list-style-type: none"> <li>1. Introductions</li> <li>2. Unit 1 discussion</li> <li>3. The Scientific Method Lab</li> <li>4. Unit 1 Essay Questions</li> </ol>
2	<ul style="list-style-type: none"> <li>○ View recorded lecture notes covering chapters 9-14</li> <li>○ Read <i>Conceptual Integrated Sciences</i>, chapters 9 &amp; 11</li> <li>○ Read Making Chemicals Naturally</li> <li>○ View The World of Chemistry (12.Water) and The Precious Envelope</li> </ul>	<ol style="list-style-type: none"> <li>1. Unit 2 discussion</li> <li>2. Caloric Content of Food Lab Assignment</li> <li>3. Unit 2 Essay Question</li> </ol>
3	<ul style="list-style-type: none"> <li>○ View recorded lecture notes covering chapters 15-21</li> <li>○ Read <i>Conceptual Integrated Sciences</i>, pp. 492, 636, 516-542</li> <li>○ View Life after People, 100 Greatest Discoveries: Biology, The Infinite Verity</li> </ul>	<ol style="list-style-type: none"> <li>1. Unit 3 discussion</li> <li>2. The Properties of Water Lab Assignment</li> <li>3. Unit 3 Essay Question</li> </ol>
4	<ul style="list-style-type: none"> <li>○ View recorded lecture notes covering chapters 22-27</li> <li>○ Read <i>Conceptual Integrated Sciences</i>, Chs 22 &amp; 24.5- 24.7</li> <li>○ Read National Resources Defense Council</li> <li>○ View the videos How the Earth was Made, National Geographic Earth Making of a Planet, End of the Earth, and Down To The Earths Core National Geographic.</li> </ul>	<ol style="list-style-type: none"> <li>1. Unit 4 discussion</li> <li>2. Pendulum and the Calculation of g Assignment</li> <li>3. Unit 4 Essay Question</li> </ol>

Unit	Reading & Preparation Activities	Graded Work Due
5	<ul style="list-style-type: none"> <li>○ View recorded lecture notes covering chapters 28-29</li> <li>○ Read <i>Conceptual Integrated Sciences</i>, 28- 29</li> <li>○ Read Universe 101 and The Planets</li> <li>○ View the video Birth of the Universe</li> </ul>	<ol style="list-style-type: none"> <li>1. Unit 5 discussion</li> <li>2. Reflection and Refraction Lab Assignment</li> <li>3. Unit 5 PowerPoint Assignment</li> </ol>
6	<ul style="list-style-type: none"> <li>○ Complete your science project</li> </ul>	<ol style="list-style-type: none"> <li>1. Unit 6 discussion</li> <li>2. Science Project</li> <li>3. Unit 6 Essay Questions</li> </ol>

**XIV. College Resources**

[Advising](#)

[Self-Service](#)

[Withdraw Form](#)

[Blackboard Learn](#)

[SCPS Bookstore](#)

[Deets Library](#)

[Online Writing Center](#): View this brief [video tutorial](#) that explains how to enroll

**IT Support:** [Marilyn.clements@sckans.edu](mailto:Marilyn.clements@sckans.edu) or 888-684-5335 x.121

**XV. ADA Compliance Statement**

Southwestern College Professional Studies is committed to making reasonable accommodations for qualified students with documented disabilities. If you have a disability that may impact your learning and for which you may need accommodations, please notify the Director of Learner Support and Academic Success, at 888.684.5335.

**XVI. Senior Capstone and Graduate Projects:**

The majority of the programs offered by Southwestern College Professional Studies conclude with a Senior Capstone or Graduate Project. During the Capstone or Project course students will be required to retrieve papers, assignments and projects that they created during their entire program of study. For this reason it is imperative that students design a method of storing program course work for use during their final class at Southwestern College Professional Studies.