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**Calumet College**

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**of Saint Joseph**

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*Calumet College of St. Joseph is a Catholic institution of higher learning dedicated to the academic, spiritual and ethical development of undergraduate and graduate students. Informed by the values of its founding religious community, the Missionaries of the Precious Blood (C.P.P.S.), the College promotes the inherent dignity of all people, social justice, an ethic of service, student empowerment, opportunity, and lifelong learning.*

**COURSE SYLLABUS, Fall 2018****Course: SCIE 102A General Science (Lecture)****Instructor Information:**

<b>Instructor Name</b>	Dr. Ahmed Lakhani
<b>Office Number:</b>	Room 512
<b>Phone Number:</b>	219-4734275
<b>Email:</b>	alakhani@ccsj.edu
<b>Office Hours:</b>	Tuesday & Thursday: 1:30 – 3:30 pm Wednesday: 1:30 – 3:30 pm
<b>Instructor Background:</b> B.S. in Biochemistry from University of Illinois at Urbana-Champaign. Ph.D. in Chemistry (focus in Physical Chemistry) from University of Illinois at Chicago. Research interest: Structures Elucidation of Biomolecule via Optical Spectroscopy (IR, UV-Vis, VCD, ECD, etc.)	

**Course Information:**

<b>Course Time:</b>	MW: 8:30 – 10:00 am
<b>Classroom:</b>	Room 336
<b>Prerequisites:</b>	Must be concurrently enrolled in SCIE 102 Lab
<b>Required Books and Materials:</b>	An Introduction to Physical Science (Thirteenth Edition): Shipman, Wilson, and Higgins
<b>Learning Outcomes/ Competencies:</b> Students in this course will: <ul style="list-style-type: none"><li>• Explain how scientific explanations are formulated, tested, and modified or validated.</li><li>• Distinguish between scientific and non-scientific evidence and explanations.</li><li>• Apply foundational knowledge and discipline-specific concepts to address issues or solve problems.</li><li>• Apply basic observational, quantitative, or technological methods to gather data and generate evidence-based conclusions.</li></ul>	

- Use current models and theories to describe, explain, or predict natural phenomena.
- Locate reliable sources of scientific evidence to construct arguments related to real-world issues.

The course also meets the following General Education Program objectives:

- 1) Students will, at an introductory level, read analytically, synthetically, and critically in a variety of genres.
- 2) Students will, at an introductory level, write in a variety of forms using valid logic, persuasive rhetoric, and correct grammar, usage, and punctuation.
- 3) Students can, at an introductory level, represent, apply, analyze, and evaluate relevant qualitative and quantitative mathematical and scientific evidence (i.e. equations, graphs, diagrams, tables, words) to support or refute an argument.
- 4) The student will, at an introductory level, be able to apply ethical standards to social issues and analyze their own core beliefs and the origin of these beliefs

**This course meets Calumet College of St. Joseph’s Signature Assignment requirement to demonstrate fundamental competency in quantitative reasoning and scientific inquiry.**

**Course Description:** A 3-credit course. The course discusses the developments over the past four centuries in the areas of physics, chemistry, earth science, and space science, by some of the brightest minds on the planet. The concepts are often greatly simplified for an introductory survey course, but understanding them will still require mental effort, flexibility, and preparation. Our current civilization is so dependent on these physical sciences that their contribution has fallen into “the background” and is often taken for granted. This course will teach the student how to use theory to problem-solve and “think like a physical scientist” (e.g. quantitative reasoning and analysis)

**Learning Strategies:** Facilitated Learning, Student Centered Learning, Collaborative Learning, Lectures and Labs

### Assessments:

<b>Major Assignments:</b>	Completed at the end of each chapter. Approximately 15.	25%
<b>Assessments:</b>	Quizzes: Given at the beginning of class; covers the assigned reading/previous lecture Lecture Exam: Four 90 minutes’ exam will be administered during class (total of 4)	10%  (Each 15%) Total: 60%
<b>Class Participation:</b>	Class attendance and participation	5%
<b>Total</b>	Total Percent	100%

**Grading Scale:**

100% – 92%: A	91% – 90%: A-	
89% – 88%: B+	87% – 82%: B	81% – 80%: B-
79% – 78%: C+	77% – 72%: C	71% – 70%: C-
69% – 68%: D+	67% – 62%: D	61% – 60%: D-
59% and below:	F	

## Course Schedule

### SCIE 102 Lecture

Class Date	Lecture/Class Discussion/Activities	HW	Quiz
Aug 27 & 29	Introduction, Course Overview Chapter 1 Introduction to Measurements	Ch. 1	Ch. 1
Labor Day, No Class Monday, September 3, 2018			
Sept 5 10	Chapter 2 Motion Chapter 3 Force	Ch. 2 Ch. 3	Ch. 2 Ch. 3
12	EXAM 1		
17 & 19 24 & 26 Oct. 1	Chapter 4 Work & Energy Chapter 5 Temperature & Heat Chapter 6 Wave and Sound	Ch. 4 Ch. 5 Ch. 6	Ch. 4 Ch. 5 Ch. 6
3	EXAM 2		
8 & 10 15 & 17 22	Chapter 7 Optics and Waves Effects Chapter 8 Electricity and Magnetism	Ch. 7 Ch. 8	Ch. 7 Ch. 8
24	EXAM 3		
29 & 31 Nov. 5 & 7 12	Chapter 9 Atomic Physics Chapter 11 The Chemical Elements	Ch. 9 Ch. 11	Ch. 9 Ch. 11
14	EXAM 4		
Thanksgiving Break, No Class November 19 to 24, 2018			
26 & 28 Dec. 3 & 5 10	Chapter 12 Chemical Bonding Chapter 13 Chemical Reaction	Ch. 12 Ch. 13	Ch. 12 Ch. 13
12	Final EXAM		
I reserve the right to change this schedule to meet the needs of the class			

## Responsibilities

Responsibilities	
<b>Attending Class</b>	<p>You cannot succeed in this class if you do not attend. We believe that intellectual growth and success in higher education occur through interaction in the classroom and laboratories. Being absent doesn't excuse you from doing class work; you have <b>more</b> responsibilities to keep up and meet the objectives of this course.</p> <p><b>Note:</b> Attendance is counted as being present from the first 10 minutes of class until the end of lecture and lab. It is the students' responsibility to make attendance a priority. Anyone missing after the first 10 minutes of class will be marked absent unless a written excuse is provided within 24 hours of the occurrence. Similarly, anyone leaving early without a written excuse and/or informing the instructor prior to leaving will be counted as absent.</p> <p>Train delay, broken down cars, oversleeping, forgetting, and other personal business are example of invalid excuses. Additionally, you should plan to</p>

	<p>arrive on time and remain throughout the lecture to avoid disrupting the class. Other classroom disruptions, such as cell phone, papers, etc. are unacceptable; there device should be turned off before the start of class</p> <p><b>Note:</b> it is to your benefit to attend each class meeting. You are responsible for the material presented in class and all in-class announcements and assignments. Attendance is mandatory, however, for all examinations since they cannot be made up at a later date will not be excused without a valid excuse. The validation of the excuse is left to the discretion of the instructor of the course whether or to accept that excuse.</p>
<b>Turning In Your Work</b>	<p>You cannot succeed in this class if you do not turn in all your work when due.</p> <p>Assignments will not be accepted after their due dates. You may request an extension in writing at least 24 hours in advance of the due date for assignments, but it is up to the instructor's discretion whether or not to allow an extension.</p>
<b>CCSJ Student Honor Code</b>	<p>This course asks students to reaffirm the CCSJ Student Honor Code:</p> <p>I, as a student member of the Calumet College academic community, in accordance with the college's mission and in a spirit of mutual respect, pledge to:</p> <ul style="list-style-type: none"> <li>• Continuously embrace <b>honesty and curiosity</b> in the pursuit of my educational goals;</li> <li>• Avoid all behaviors that could impede or distract from the academic progress of myself or other members of my <b>community</b>;</li> <li>• Do my own work with <b>integrity</b> at all times, in accordance with syllabi, and without giving or receiving inappropriate aid;</li> <li>• Do my utmost to act with commitment, inside and outside of class, to the goals and <b>mission</b> of Calumet College of St. Joseph.</li> </ul>
<b>Using Electronic Devices</b>	<p>Electronic devices can only be used in class for course-related purposes. If you text or access the Internet for other purposes, you may be asked to leave, in which case you will be marked absent.</p> <p>No social media chatting/texting will be allowed to be used during lecture or lab times unless otherwise directed by the instructor. No videotaping or recording of lecture without discretion of the instructor. The instructor reserves the right to ask you to leave the room if you interrupt the class.</p> <p>The science faculty will address electronic device uses as follows:</p> <p>Occurrence</p> <p>1<sup>st</sup> – Students is given a verbal warning  2<sup>nd</sup> – Students is instructed to leave the classroom  The student cannot return to class until they have met with the professor.</p> <p>3<sup>rd</sup> – Student is instructed to leave the classroom  The student cannot return to class until they have met with V.P. of Academic Affairs.</p>
<b>Participating in Class</b>	<p>You must be on time, stay for the whole class and speak up in a way that shows you have done the assigned reading. If you are not prepared for class, you may be asked to leave, in which case you will be marked abse</p>
<b>Doing Your Own Work</b>	<p>If you turn in work that is not your own, you will be subject to judicial review</p>

	<p>by the Faculty-Student Grievance Committee. These procedures can be found in the Student Planner. The maximum penalty for any form of academic dishonesty is dismissal from the College.</p> <p>Using standard citation guidelines to document sources avoids plagiarism. You'll find guides to the major citation methods at the CCSJ Specker Library Web page at <a href="http://www.ccsj.edu/library/subjectsplus/subjects/guide.php?subject=cite">http://www.ccsj.edu/library/subjectsplus/subjects/guide.php?subject=cite</a></p> <p><b>PLEASE NOTE:</b> All papers may be electronically checked for plagiarism.</p>
<b>Sharing Your Class Experience</b>	At the end of the term, you will have the opportunity to evaluate your classroom experience. These confidential surveys are <b>essential</b> to our ongoing efforts to ensure that you have a great experience that leaves you well prepared for your future. Take the time to complete your course evaluations – we value your feedback!
<b>Withdrawing from Class</b>	After the last day established for class changes has passed (see the College calendar in the CCSJ Course Catalog), you may withdraw from a course by following the policy outlined in the Course Catalog.

<b>Resources</b>	
<b>CCSJ Book Rental Program</b>	The CCSJ Book Program ensures that everyone has the right course materials on the first day of class to be successful. You pay a book rental fee each semester, and in return, receive all the materials for all your classes prior to the beginning of classes. At the end of the semester, simply return the books. For traditional students, the Book Rental Program is conveniently located in the library, where students can pick up and return their books. For students in accelerated programs and graduate programs, books will be delivered to their homes and they can return them by mail. For more information, see <a href="http://www.ccsj.edu/bookstore">http://www.ccsj.edu/bookstore</a> . <b>All books must be returned at the end of the semester or you will incur additional fees, which will be charged to your student account.</b>
<b>Student Success Center:</b>	The Student Success Center provides faculty tutors at all levels to help you master specific subjects and develop effective learning skills. It is open to all students at no charge. You can contact the Student Success Center at 219 473-4287 or stop by the Library.
<b>Disability Services:</b>	Disability Services strives to meet the needs of all students by providing academic services in accordance with Americans with Disabilities Act (ADA) guidelines. If you believe that you need a “reasonable accommodation” because of a disability, contact the Disability Services Coordinator at 219-473-4349.
<b>Student Assistance Program</b>	Through a partnership with <b>Crown Counseling</b> , Calumet College of St. Joseph provides a free Student Assistance Program (SAP) to current students. The SAP is a confidential counseling service provided to students for personal and school concerns which may be interfering with academic performance and/or quality of life. The SAP counselor is available on campus once a week and off-site at the Crown Counseling offices in Crown Point or Hammond. For more information, <b>contact Kerry Knowles SAP Counselor</b> , at 219-663-6353 (office), 219-413-3702 (cell), or <a href="mailto:kerryk@crowncounseling.org">kerryk@crowncounseling.org</a> .
<b>CCSJ Alerts:</b>	Calumet College of St. Joseph’s emergency communications system will tell

	you about emergencies, weather-related closings, or other incidents via text, email, or voice messages. Please sign up for this important service annually on the College's website at: <a href="http://www.ccsj.edu/alerts/index.html">http://www.ccsj.edu/alerts/index.html</a> .
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