
Calumet College



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, Spring 2018**Course: BIO 205 A, General Biology II (Lab)****Instructor Information:**

Instructor Name	Dr. Ahmed Lakhani
Office Number:	Room 524
Phone Number:	219-473-4275
Email:	Alakhani@ccsj.edu
Hours Available:	Office Hr. will be available outside my office (524) and will be posted on the Blackboard (BB)
Instructor Background: B.S. in Biochemistry & Minor in Chemistry; University of Illinois at Urbana-Champaign. Ph.D. University of Illinois at Chicago (Physical Chemistry 2011). Research Interest: Structures Elucidation of Bio system, optical Spectroscopy	

Course Information:

Course Time:	Lab W: 10:15 – 11:45 am
Classroom:	336
Prerequisites:	MATH 103 or higher, BIO 115 and concurrent enrollment in BIOL 115 Lab
Required Books and Materials:	Urry's Campbell Biology in Focus, 2 nd Edition, 2016, Pearson Publishing. ISBN: 9780134433769

Learning Outcomes/ Competencies:

Students in this course will:

- Understanding how science both relates to and differs from other academic disciplines; describe the scientific method and how to do science through the process of scientific inquiry
- Use scientific knowledge combined with critical thinking to evaluate current society concerns
- Understand the basic chemical structure underlying the major molecules essential to life, as well as how these chemical properties relate to key cellular process

- Describe the structure and functions of basic components of cells, especially macromolecules, membranes, and organelles, as well as their specific role in major cellular processes
 - Understand how cellular components transform and utilize energy; explain what occurs during cellular respiration and photosynthesis, and why these processes are essential to life
 - Explain the major events of the cell cycle; compare and contrast mitosis and meiosis
 - Describe how inheritance of traits works in sexual reproduction; understand the basic principal of genetics at an organismal, chromosomal, and molecular level; explain what occur at the cellular/molecular level during gene expression
 - Apply knowledge of basic principals of genetics to solve a variety of genetic problem
 - Apply knowledge of basic cell biology to understand current techniques in biotechnology
- Above all, establish a strong foundation of knowledge that will allow you to keep up with and be competitive within the rapidly growing field of molecular and cellular biology

Course Description: 3 credit hours. Introduction to biological concepts, including origins of life, biochemical principles, energetics, cellular organization, mechanisms of heredity, and evolution. Students will explore unifying concepts in biological science while developing key investigative skills necessary for scientific exploration and hypothesis testing. Includes laboratory.

Learning Strategies: Active learning, BlackBoard, group discussions, team projects, collaborative learning, laboratory exercises, demonstrations.

Experiential Learning Opportunities: Laboratory experience is essential for a fundamental understanding of the scientific method. This course has a required laboratory portion that provides students with experiential learning through experimental design, hypothesis development, data interpretation, and communication of results through laboratory reports.

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	

Assignment	Points possible
~8 Lab performance (@ 10 points each)	80 points
Total	80 points

Laboratory:

There will be approximately 8 -12 laboratories experimental (points will adjusted accordingly) reports will be required for this course. Laboratory grades will be based on the submitted, individually prepared, lab reports, performance of practice exercises, and participation. Laboratory reports are due at the beginning of the next scheduled formal lab. Late lab report submissions will not be accepted. A style sheet for lab report requirements and format is included with this syllabus. Lab information packets will typically be distributed one class day before the lab.

Responsibilities

Attending Class	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. However, we do not want
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	to penalize students for participating in college-sponsored events. When you miss class because of a college event, you must give notice of your absence in advance, and you are responsible for all missed work. Being absent doesn't excuse you from doing class work; you have more responsibilities to keep up and meet the objectives of this course.
Turning In Your Work	You cannot succeed in this class if you do not turn in all your work on the day it is due.
CCSJ Student Honor Code	This course asks students to reaffirm the CCSJ Student Honor Code: 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: <ul style="list-style-type: none"> • Continuously embrace honesty and curiosity in the pursuit of my educational goals; • Avoid all behaviors that could impede or distract from the academic progress of myself or other members of my community; • Do my own work with integrity at all times, in accordance with syllabi, and without giving or receiving inappropriate aid; • Do my utmost to act with commitment, inside and outside of class, to the goals and mission of Calumet College of St. Joseph.
Using Electronic Devices	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.
Participating in Class	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 discussion, you may be asked to leave, in which case you will be marked absent.
Doing Your Own Work	If you turn in work that is not your own, you are subject to judicial review, and these procedures can be found in the College Catalog and the Student Planner. The maximum penalty for any form of academic dishonesty is dismissal from the College. Using standard citation guidelines, such as MLA or APA format, to document sources avoids plagiarism. The Library has reference copies of each of these manuals, and there are brief checklists in your Student Handbook and Planner. PLEASE NOTE: All papers may be electronically checked for plagiarism.
Tracking Your Progress	Your midterm grade will be available on MyCCSJ between Weeks 6 and 8. Be sure to see how you're doing and follow up with your instructor.
Sharing Your Class Experience	At the end of the term, you will have the opportunity to evaluate your classroom experience. These confidential surveys are essential 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!
Withdrawing from Class	After the last day established for class changes has passed (see the College calendar), you may withdraw from a course by following the policy outlined in the CCSJ Course Catalog.

Resources	
Student Success Center:	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.
Disability Services:	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.
Student Assistance Program	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. For more information, contact the Vice President for Enrollment and Retention, Dr. Dionne Jones-Malone, Office # 611, 219-473-4305.
CCSJ Alerts:	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: http://www.ccsj.edu/alerts/index.html .

Emergency Procedures

MEDICAL EMERGENCY

EMERGENCY ACTION
<ol style="list-style-type: none"> 1. Call 911 and report incident. 2. Do not move the patient unless safety dictates. 3. Have someone direct emergency personnel to patient. 4. If trained: Use pressure to stop bleeding. 5. Provide basic life support as needed.

FIRE

EMERGENCY ACTION
<ol style="list-style-type: none"> 1. Pull alarm (located by EXIT doors). 2. Leave the building. 3. Call 911 from a safe distance, and give the following information: <ul style="list-style-type: none"> • Location of the fire within the building. • A description of the fire and how it started (if known)

BUILDING EVACUATION

1. All building evacuations will occur when an alarm sounds and/or upon notification by security/safety personnel. **DO NOT ACTIVATE ALARM IN THE EVENT OF A BOMB THREAT.**
2. If necessary or if directed to do so by a designated emergency official, activate the building alarm.
3. When the building evacuation alarm is activated during an emergency, leave by the nearest marked exit and alert others to do the same.
4. Assist the disabled in exiting the building! Remember that the elevators are reserved for persons who are disabled. **DO NOT USE THE ELEVATORS IN CASE OF FIRE. DO NOT PANIC.**
5. Once outside, proceed to a clear area that is at least 500 feet away from the building. Keep streets, fire lanes, hydrant areas and walkways clear for emergency vehicles and personnel. The assembly point is the sidewalk in front of the college on New York Avenue.
6. **DO NOT RETURN** to the evacuated building unless told to do so by College official or emergency responders.

IF YOU HAVE A DISABILITY AND ARE UNABLE TO EVACUATE:

Stay calm, and take steps to protect yourself. If there is a working telephone, call 911 and tell the emergency dispatcher where you are **or** where you will be moving. If you must move,

1. Move to an exterior enclosed stairwell.
2. Request persons exiting by way of the stairway to notify the Fire Department of your location.
3. As soon as practical, move onto the stairway and await emergency personnel.
4. Prepare for emergencies by learning the locations of exit corridors and enclosed stairwells. Inform professors, and/or classmates of best methods of assistance during an emergency.

HAZARDOUS MATERIAL SPILL/RELEASE

EMERGENCY ACTION

1. Call 911 and report incident.
2. Secure the area.
3. Assist the injured.
4. Evacuate if necessary.

TORNADO

EMERGENCY ACTION

1. Avoid automobiles and open areas.
2. Move to a basement or corridor.
3. Stay away from windows.
4. Do not call 911 unless you require emergency assistance.

SHELTER IN PLACE

EMERGENCY ACTION

1. Stay inside a building.
2. Seek inside shelter if outside.
3. Seal off openings to your room if possible.
4. Remain in place until you are told that it is safe to leave.

BOMB THREATS

EMERGENCY ACTION

1. Call 911 and report incident.
2. If a suspicious object is observed (e.g. a bag or package left unattended):

- Don't touch it!
- Evacuate the area.

TERRORISM AND ACTIVE SHOOTER SITUATIONS

EMERGENCY ACTION

1. Call 911 and report intruder.

RUN, HIDE OR FIGHT TIPS:

1. **Prepare** – frequent training drills to prepare the most effectively.
2. **Run and take others with you** – learn to stay in groups if possible.
3. **Leave the cellphone.**
4. **Can't run? Hide** – lock the door and lock or block the door to prevent the shooter from coming inside the room.
5. **Silence your cellphone** -- use landline phone line.
6. **Why the landline?** It allows emergency responders to know your physical location.
7. **Fight** – learn to “fight for your life” by utilizing everything you can use as a weapon.
8. **Forget about getting shot – fight!** You want to buy time to distract the shooter to allow time for emergency responders to arrive.
9. **Aim high** – attack the shooter in the upper half of the body: the face, hands, shoulder, neck.
10. **Fight as a group** – the more people come together, the better the chance to take down the shooter.
11. **Whatever you do, do something** – “react immediately” is the better option to reduce traumatic incidents.

Lab Schedule

Week	Topic
1	Introduction to Class (no lab)
2	Measurement Lab
3	Cellular Respiration (Part I)
4	Exam 1
5	Cellular Respiration (Part II)
6	Spring Break
7	Mitosis/Meiosis
8	Chromosomes
9	Exam II
10	Genetics (DNA lab)
11	Genetics
12	Protein
13	Catch up, and/or review
14	Review
15	Final

Note* The lab schedule is tentative. The instructor reserves the right to change this syllabus at any time. Any changes will be announced in class in advance.