

Department of Natural Sciences  
 School of Science, Technology and Mathematics  
 Dalton State College



Scheduled Meeting Times			
Type	Time	Days	Where
Class	6:00-7:10 PM	MTWR	SEQUOYA HALL 230
Lab	7:20-9:10 PM	TR	SEQUOYA HALL 213

**Thursday's Lab will meet every other week**

**Prof. Hussein Mohamed**

Associate Professor of Plant Biology

**Office:** Sequoia Hall 141-D      **Office Phone:** 706-272-2196      **Cell Phone:** 510-255-1393

**Email:** [hmohamed@daltonstate.edu](mailto:hmohamed@daltonstate.edu)

**TANTATIVE IMPORTANT DATES**

*Should any changes occur, students will have adequate notice to adjust their schedules*

**Lectures' Exams Schedule**

**Lecture exam I (Unit I) - Online** ----- **June 02**  
**Lecture exam II (Unit I & II) - Online** ----- **June 16**  
**Lecture Exam III (Unit III & IV) - Online** ----- **June 30**

**Lab's Quizzes & Exams Schedule**

**Lab Quiz 1** ----- **May 30**  
**Lab Quiz 2** ----- **June 06**  
**Lab Quiz 3** ----- **June 13**  
**Lab Quiz 4** ----- **June 20**  
**Lab Quiz 5** ----- **June 27**  
**Lab Quiz 6** ----- **July 11**

**Lab Final Exam** ----- **July 18**

**Final exam IN CLASS (Chapters 14-18)** ----- **Thursday July 20**

**COURSE INSTRUCTOR'S OFFICE HOURS**

Monday                                      12:30 pm – 02:30 pm  
 Tuesday                                      12:30 pm – 02:30 pm  
 Wednesday                                   04:30 pm – 05:30 pm

*Other times may be arranged by appointment, although you are welcome to stop by my office or lab at any time. Questions submitted via email will be responded to as promptly as possible.*

## COURSE CONTENTS

The Biology course is a college introductory biology course usually taken by biology majors during their first year. This is a project- and laboratory-based course where the students will be allowed to generate knowledge about advanced level of biological science and assists students to comprehend the relevance of biology and all the sciences to today's technological World.

*In general, this course covers the following topics:*

1. Chemical processes underlying life processes.
2. Basic structure and function of cells and cell's organelles.
3. Fundamental characteristics of living organisms.
4. Metabolic pathways and energy transfer
5. Mechanisms of cellular attachment and communication
6. Cell cycles- Cell division functions in reproduction, growth, and repair
7. Genetic variation at individual and population levels.
8. The chromosomal basis of inheritance
9. DNA, RNA and protein biosynthesis

**Textbook:** Free, on-line text: <https://openstaxcollege.org/textbooks/biology>  
*Biology, 10<sup>th</sup> Ed. 2015* (Solomon et. al.).

**Lab Manual:** Labs can be downloaded from  
<http://libguides.daltonstate.edu/PrinciplesofBiology/labmanual>  
You should bring a printed copy of each week's lab with you to lab. I will not have copies of the lab there for you.

## GENERAL COURSE OBJECTIVES:

1. To help prepare students who wish to pursue upper division coursework in biology or biology-related fields.
2. To provide students with an opportunity to understand and appreciate the complexity and relationships of living systems.
3. To make students aware of changing technologies in science and the responsibilities and ethical decisions that comes with the use of various technologies.

## AFTER COMPLETING THE COURSE, STUDENTS SHOULD BE ABLE TO:

1. Use biological terminology, including chemical terminology, in appropriate circumstances as it applies to different biological concepts
2. Describe what it means to be "living", and how cells are central to this concept.
3. Describe, in general, the importance of photosynthesis and cellular respiration to organisms; and, in particular, how the processes are used to generate ATP
4. Understand (in general) how genes determine the characteristics of organisms and how this, therefore, applies to you
5. Describe how the process of natural selection leads to adaptive evolution of organisms; discuss the ample evidence that supports the concept of evolution
6. Better utilize critical thinking skills to assimilate and apply information in novel circumstances, hopefully both in biology and other disciplines

**CLASS CALENDAR/ASSIGNMENTS****CHANGES IN SYLLABUS**

*While changes to the syllabus after the start of the course are uncommon. If any changes are made to your syllabus, you will have adequate notice to adjust your schedule*

	Topic	Text
<b>Week 1: May 22 – May 25</b>		
	Introduction, syllabus, policies The study of life	Ch. 1
	The chemical foundations of life	Ch. 2
	The chemical foundations of life cont.	Ch. 2
<i>May 23 (T) Lab #1</i>	<i>Scientific method</i>	
<i>May 25 (R) Lab #2</i>	<i>Taxonomy: Classification &amp; Naming organisms</i>	
<b>Week 2: May 29 – June 1</b>		
<b>Monday May 29, No Class – Memorial Day</b>		
	Biological macromolecules	Ch. 3
	Biological macromolecules cont.	Ch. 3
	Cell structure	Ch. 4
<i>May 30 (T) Lab #3</i>	<i>Biological Macromolecules</i>	
<b>Friday June 2: Test 1 (online) Chapters 1-4</b>		
<b>Week 3: June 5 – June 8</b>		
	Structure/Function of plasma membranes	Ch. 5
	Metabolism	Ch. 6
<i>June 06 (T) Lab #4, # 5</i>	<i>Microscopy; Structure and function of living cells</i>	
<i>June 08 (R) Lab #6</i>	<i>Diffusion, osmosis, and membranes</i>	
<b>Week 4: June 12 – June 15</b>		
	Photosynthesis	Ch. 7
	Cellular respiration	Ch. 8
<i>June 13 (T) Lab #7</i>	<i>Enzyme: Catalyst of life</i>	
<b>Friday June 16: Test 2 (online) Chapters 5-8</b>		
<b>Week 5: June 19 – June 22</b>		
	Cell reproduction	Ch. 10
	Meiosis and sexual reproduction	Ch. 11
<i>June 20 (T) Lab #8</i>	<i>Respiration and photosynthesis</i>	
<i>June 22 (R) Lab #9</i>	<i>Mitosis and cytokinesis</i>	
<b>Week 6: June 26 – June 29</b>		
	Mendelian experiments and heredity	Ch. 12
	Modern understanding of inheritance	Ch. 13
<i>June 27 (T) Lab #10</i>	<i>Heredity</i>	
<b>Friday June 30: Test 3 (online) Chapters 10-13</b>		

## CLASS CALENDAR/ASSIGNMENTS

(continue)

	Topic	Text
<b>Week 7: July 3 – July 6</b>		
	DNA structure and function	Ch. 14
	Genes and proteins	Ch. 15
<b>July 4 (T)</b>	<b>No Lab 4<sup>th</sup> of July – College Closed</b>	
<i>July 6 (R) Lab #11</i>	<i>Nucleic acids: blueprints for life</i>	
<b>Week 8: July 10 – July 13</b>		
	Gene expression	Ch. 16
	Biotechnology	Ch. 17
<i>July 11 (T) Lab #12</i>	<i>Biotechnology</i>	
<b>Week 9: July 17 - July 20</b>		
	Evolution and the origin of species	Ch. 18
<i>July 18 (T) Lab #13</i>	<i>Final Lab Exam</i>	
<b>Final exam <u>IN CLASS</u> (Chapters 14-18) July 20</b>		

**INSTRUCTIONAL METHODS (INCLUDING EXAMINATION POLICIES)****ATTENDANCE POLICY**

Attendance is required. You are expected to be in class on time and stay until class is dismissed. *Not all of the information given in a chapter of the book will be covered. Details of pertinent information will be given in the lectures. Therefore, it is important to attend class and take notes.* Attendance will be taken every class period. Absence from class, even for legitimate reasons, has an impact on your overall learning and sharing of information in class. *If you are absent for any reason, it is expected that you get notes and handouts from a classmate.* Class absences will negatively impact overall grade in the course.

**COURSE EVALUATION**

Course evaluation will be based on homework assignments, short writing assignments, and exams. Final grades will be based on the total points obtained at the end of the semester out of the total available points. A grading curve will be applied if **absolutely** necessary and only at the end of the semester.

**GRADING SYSTEM:**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>F</b>
90 -100%	80-89%	70 – 79%	60 – 69%	<60%

**GRADE BREAKDOWN**

Component	%
Class attendance	10
Lecture Exams (3x10% each)	30
Lecture Assignments	10
Lab Quizzes/reports/attendance	15
Lab Final Exam	15
Class Final Exam	20
<b>Total</b>	<b>100</b>

**EXAMS AND QUIZZES:**

Exams and quizzes will consist of multiple choice and short answer questions. Exams and quizzes dates will be announced at least one class period in advance.

**EXTRA CREDIT**

No extra credit will be available.

**CELL PHONES:**

**No play/text/whatever on your phone throughout class.** If you have an emergency situation that may require receiving a call or message during class, let me know BEFORE class starts.

**MAKE-UPS:**

*The student shall be allowed to make up any work missed during the time he/she is off campus representing DSC in an official capacity. He/she shall discuss what will be missed with the instructor and make arrangements to make up any assignments, tests, presentations, etc. that were scheduled on that date.*

Make-ups for exams will be allowed for reasonable and verifiable excuses. Examples of reasonable excuses are: medical emergency, family death, illness that requires doctor's care. I will not allow a make-up for any unreasonable excuse.

**DROP/WITHDRAWAL POLICY:**

Students wishing to withdraw from the course may do so without penalty until the mid-point of the semester, and a grade of **W** will be assigned. After that point, withdrawal without penalty is permitted only in cases of extreme hardship as determined by the Vice President for Academic Affairs; otherwise a grade of **WF** will be issued. (At Dalton State College, the Hardship Withdrawal process requires students to withdraw from all classes at the college.) The proper form for dropping a course is the **Schedule Adjustment Form**, which can be obtained at the Enrollment Services Office in Westcott Hall. The Schedule Adjustment Form must be submitted to the Enrollment Services Office. Students who disappear, completing neither the official withdrawal procedure nor the course work, will receive the grade of **F**.

**This instructor will not withdraw students from the class. Withdrawal from any Dalton State College classes is a student responsibility.**

**COMPLETE WITHDRAWAL STATEMENT:**

The proper form for withdrawing from all classes at the college after the official drop/add period but before the published withdrawal date is the **Schedule Adjustment Form**. *All students must* meet with a staff member at the Office of Academic Resources in the Pope Student Center to initiate the withdrawal process. After meeting with the staff member, students will then finalize the withdrawal process in the Enrollment Services Office.

## ETHICAL CONDUCT

**Academic Dishonesty:** Cheating and plagiarism are a part of the Dalton State Code of Student Conduct, which can be found in its most updated form at <http://daltoncampuslife.com/student-conduct/>. ANY assistance provided or given in any way toward work in a class constitutes cheating, unless such behavior is authorized by your instructor. Additionally, any use of the ideas or words of others should be noted, or this will constitute plagiarism. For more details on what Dalton State considers to be Academic Dishonesty, please review the Code of Student Conduct. Instructors will assign grades based on classroom performance. Additional sanctions may be provided as a learning experience from the Student Conduct process. Borrowing another students' work or collaborating on an assignment not designated as collaborative is unacceptable. Furthermore, presenting work that was completed for another class, while not plagiarism technically, is not the same as presenting original work, and is therefore unacceptable.

**Classroom Behavior:** Dalton State is committed to respect via the Roadrunner Respect pledge. To learn more, please visit <http://daltoncampuslife.com/roadrunner-respect/>.

*“I pledge to show my fellow Roadrunner students, faculty, staff, and administration respect by treating others the way they want to be treated and by thinking about others first before making decisions that might affect them”.*

## OFFICIALLY APPROVED DSC GROUPS AND ACTIVITIES

When students are engaged in officially approved Dalton State groups or activities that require them to participate in events off campus during school days, they shall be treated similarly to any faculty or staff member acting in that same capacity. Thus, just as faculty and staff have excused absences from their regular work schedules, students shall be excused from class without penalty if they are off campus representing Dalton State College in an approved, official capacity during their regular class time. Examples include presenting a paper or otherwise participating in a conference, attending a University System student affairs event, participating in intercollegiate competition (athletic or academic), participating in an approved field trip, etc.

The student needs to provide the following information to the instructor prior to the date when he/she will be absent from class:

- Notification of the event (in the case of athletics, students should provide each instructor a schedule of away events at the beginning of the semester or as soon as possible after the schedule is available);
- estimated time of departure from and return to campus (for example, if a student has an away game in the evening and will not be leaving campus until 3:00, he/she will not be excused from classes prior to that time on that day; similarly if the event is in the morning and the student will be returning to campus during the day, he/she is expected to attend any class scheduled after the return trip); and
- contact information for the person or organization sponsoring/authorizing the student's participation in the event.

**DISABILITY SUPPORT SERVICES**

Students with disabilities or special needs are encouraged to contact **Disability Support Services**. In order to make an appointment or to obtain information on the process for qualifying for accommodations, the **student** should visit the Disability Support Services Library Guide at <http://www.libguides.daltonstate.edu/Disability> or contact the Coordinator of Disability Support Services:

Andrea Roberson, Coordinator. Pope Student Center, lower level 706/272-2524  
[aroberson@daltonstate.edu](mailto:aroberson@daltonstate.edu) <http://libguides.daltonstate.edu/c.php?g=24716&p=149667>

**Workforce Innovations Opportunity Act:** Questions regarding students receiving financial assistance through the Workforce Innovations Opportunity Act should be directed to 706- 295-6840.

**TITLE IX INFORMATION:*****Sex Discrimination, Harassment, & Assault***

Sexual harassment is unwelcome, gender-based verbal or physical conduct that is sufficiently severe, persistent or pervasive that it has the effect of interfering with, denying or limiting someone's ability to participate in or benefit from the college's educational program and/or activities, and is based on power differential (quid pro quo), the creation of a hostile environment, or retaliation. Sexual misconduct is a form of sexual harassment prohibited by Title IX. Sexual misconduct refers to "physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent due to the victim's use of drugs or alcohol. An individual also may be unable to give consent due to an intellectual or other disability." Sexual misconduct includes dating violence, domestic violence, rape, sexual assault, sexual battery, stalking, and sexual coercion.

***Reporting Options***

Call 911 if you are in an emergency situation

**Dalton State Public Safety (this report is not confidential)**

Tech Building- Upper Level - 706-272-4461 Online Sexual Assault Report -

<https://dynamicforms.ngwebsolutions.com/ShowForm.aspx?RequestedDynamicFormTemplate=3fe5724c-a8bd-4a31-9c25-1a3d35110a51>

***If you would like to report to Dalton State Administration: (this report is not confidential)***

Report Title IX complaint online: [http://daltonstate.edu/campus\\_life/student-conduct-about.cms](http://daltonstate.edu/campus_life/student-conduct-about.cms)

Report Student-on-Student Title IX complaint in person:

Brittnie Lee, Office of Student Life. Coordinator for Student Responsibility & Service/ Deputy Title IX Coordinator Pope 113. [balee@daltonstate.edu](mailto:balee@daltonstate.edu), 706-272-2999

Report Title IX complaint involving Faculty or Staff in person:

Faith Miller, Human Resources. Director of Human Resource/ Title IX Coordinator Memorial 122: [fmiller@daltonstate.edu](mailto:fmiller@daltonstate.edu) 706-272-2034

***If you would like to talk with someone confidentially:***

Dalton State Counseling & Career Services: Academic Resources: Lower Pope:

[counseling@daltonstate.edu](mailto:counseling@daltonstate.edu) 706-272-4429 <http://libguides.daltonstate.edu/Counseling>