

	<b>Course</b>	BIOL 2311 Modern Biology I
	<b>Professor</b>	Mehmet Candas
	<b>Term</b>	Summer 2016
	<b>Meetings</b>	<u>Lecture (OU1) MWF 11:30am-12:45pm SOM 1.110</u> Workshop (OU1) T 1:00pm - 2:15pm FO 3.616 Workshop (OU2) R 1:00pm - 2:15pm FO 3.616

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#### Professor's Contact Information

<b>Office Phone</b>	972-883-6338
<b>Office Location</b>	FN 3.206
<b>Email Address</b>	candas@utdallas.edu
<b>Office Hours</b>	TR 11:00 am - 1:00 p.m.
<b>Other Information</b>	Best way to reach Dr. Candas is via email communication. If you need to have a meeting, please schedule via e-mail.

<b>Teaching Assistants</b>	
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#### General Course Information

<b>Pre-requisites</b>	CHEM 1311 General Chemistry I CHEM1312 General Chemistry II
<b>Co-requisites</b>	BIOL 2111 Introduction to Modern Biology I Workshop
<b>Course Description</b>	The course covers fundamental concepts in modern biology with an emphasis on molecular and cellular basis of biological phenomena. Lecture topics include the basic biochemistry of biological molecules; cellular metabolism, organization of prokaryotic and eukaryotic cells, introductory classical and molecular genetics, essentials of mammalian physiology, organizational and operation principles of endocrine, immune, and nervous systems, and selected aspects of developmental biology. In addition to lectures, topics are reviewed in workshop classes in small, informal meetings with discussions, question/answer sessions, and homework assignments.

<b>Course Objective</b>	This course is organized to engage students to explore fundamental concepts in biology. The objective is to review the current concepts pertinent to molecular, cellular and organism-level biology. Scientific methodology and experimentation that contributes to our understanding of structural and functional aspects of biological molecules and cells is stressed.
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<b>Learning Outcomes</b>	<p>Expected learning outcomes:</p> <ul style="list-style-type: none"> <li>▪ Students will be able to apply deductive reasoning and make arguments about major issues of a scientific nature.</li> <li>▪ Students will understand the basics of cellular structures and biological processes including metabolism, energy production, signal transduction, cell division, mechanisms of development, and cell differentiation.</li> <li>▪ Students will be able to relate genetic regulation; how genes function and how they are controlled</li> </ul>
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<b>Required Textbook and Online Access</b>	<ul style="list-style-type: none"> <li>• Biological Science (Freeman &amp; Quillin &amp; Allison) <b>volume 1</b> (5<sup>th</sup> edition)</li> <li>• Mastering Biology Access Card/Code</li> </ul> <p>There are 3 options for textbook and Mastering Biology Access:</p> <ol style="list-style-type: none"> <li><b>1)</b> Mastering Biology Access Card + Books a la carte (3 hole punch, Volumes 1,2,3), Includes 24 Months Access for Pearson eText Bookstore ISBN(s): 0321862155, 9780321862150</li> <li><b>2)</b> Mastering Biology Access Card + Print Text (Volumes 1,2,3), Includes 24 Months Access for Pearson eText Bookstore ISBN(s): 032174361X, 9780321743619 (Volumes 1,2,3)</li> <li><b>3)</b> Mastering Biology Access Card, Includes 24 Months Access for Pearson eText Bookstore ISBN(s): 0321886453, 9780321886453 This option can be used with individual/separate volumes of the textbook, or a used copy of the textbook that has no access code.</li> </ol> <p><b>Important note:</b> During this summer term (2016), if you also are taking BIOL 2312 Modern Biology II, which uses the volume 3 of the same textbook, whole textbook (volume 1+2+3 combined), may be better option.</p>				
	<ul style="list-style-type: none"> <li>• Mastering Biology <b>registration</b> at: <a href="http://www.pearsonmylabandmastering.com/northamerica/masteringbiology/students/get-registered/">http://www.pearsonmylabandmastering.com/northamerica/masteringbiology/students/get-registered/</a></li> <li>• Mastering Biology <b>login/sign in</b> at: <a href="http://www.masteringbiology.com/site/login.html">http://www.masteringbiology.com/site/login.html</a></li> </ul> <table border="1" data-bbox="483 1696 1360 1774"> <thead> <tr> <th>COURSE ID</th><th>COURSE TITLE</th></tr> </thead> <tbody> <tr> <td>BIOL2311SUMMER2016</td><td>BIOL 2311 MODERN BIOLOGY I summer 2016</td></tr> </tbody> </table>	COURSE ID	COURSE TITLE	BIOL2311SUMMER2016	BIOL 2311 MODERN BIOLOGY I summer 2016
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**BIOL 2311 MODERN BIOLOGY I - LECTURE CLASS**  
**Topics and Tentative Schedule - Summer 2016**

Dates	Days	Chapters	Topics	Online Homeworks
23 May	Mon	Chp 1	Introduction to Modern Biology	
25 May	Wed	Chp 1	The Tree of Life	
27 May	Fri	Chp 2	Water and Carbon	
30 May	Mon		NO CLASS	
1 June	Wed	Chp 3	Protein Structure & Function	
3 June	Fri	Chp 3	Protein Structure & Function	
6 June	Mon	Chp 4	Carbohydrates	
8 June	Wed	Chp 5	Nucleic Acids	
<b>10 June</b>	<b>Fri</b>	<b>Chps 1-5</b>	<b>Exam 1</b>	<b>12 June, 11:59 pm</b>
13 June	Mon	Chp 6	Lipids and membranes	
15 June	Wed	Chp 7	Inside the Cell	
17 June	Fri	Chp 11	Cell-Cell Interactions	
20 June	Mon	Chp 8	Energy and Enzymes	
22 June	Wed	Chp 9	Respiration and Fermentation	
24 June	Fri	Chp 9	Respiration and Fermentation	
27 June	Mon	Chp 10	Photosynthesis	
29 June	Wed	Chp 10	Photosynthesis	
1 July	Fri		NO CLASS	
4 July	Mon		NO CLASS	
6 July	Wed	<b>Chps 6-9, 11</b>	<b>Exam 2</b>	<b>5 July, 11:59 pm</b>
8 July	Fri	Chps 12, 13	Cell Cycle and Meiosis	
11 July	Mon	Chp 14	Mendel and the Gene	
13 July	Wed	Chp 15	DNA Synthesis	
15 July	Fri	Chp 15	DNA Synthesis	
<b>18 July</b>	<b>Mon</b>	<b>Chps 10, 12-15</b>	<b>Exam 3</b>	<b>19 July, 11:59 pm</b>
20 July	Wed	Chp 16	How Genes Work	
22 July	Fri	Chp 17	Transcription and Translation	
25 July	Mon	Chp 18	Bacterial Gene Expression	
27 July	Wed	Chp 18	Bacterial Gene Expression	
29 July	Fri	Chp 19	Eukaryotic Gene Expression	
1 Aug	Mon	Chp 19	Eukaryotic Gene Expression	
<b>3 Aug</b>	<b>Wed</b>	<b>Chps 16-19</b>	<b>Exam 4 (last exam)</b>	<b>3 Aug, 11:59 pm</b>

The descriptions and timelines indicated in this syllabus are subject to change at the discretion of the Professor.

**BIOL 2111 MODERN BIOLOGY I - WORKSHOP CLASS**  
**Topics and Tentative Schedule - Summer 2016**

Dates	Days	Chapters	Topics	Assignments
June 31 June 2	Tue Thu	Chp 2 Chp 3	Water and Carbon Protein Structure & Function	
June 7 June 9	Tue Thu	Chp 4 Chp 5	Nucleic acids Carbohydrates	In-class quiz from topics covered in the previous workshop week
<b>June 10</b>	<b>Fri</b>	<b>LECTURE EXAM 1</b>	<b>Chp 1-5</b>	
June 14 June 16	Tue Thu	Chp 6 Chp 7 Chp 11	Lipids & membranes Inside Cell Cell-Cell Interactions	In-class quiz from topics covered in the previous workshop week
June 21 June 23	Tue Thu	Chp 8 Chp 9	Energy and enzymes Respiration, fermentation	In-class quiz from topics covered in the previous workshop week
June 28 June 30	Tue Thu	Chps 9 Chp 10	Respiration, fermentation Photosynthesis	In-class quiz from topics covered in the previous workshop week
<b>June 29</b>	<b>Wed</b>	<b>LECTURE EXAM 2</b>		
July 5 July 7	Tue Thu	Chp 12 Chp 13	Cell Cycle Meiosis	In-class quiz from topics covered in the previous workshop week
July 12 July 14	Tue Thu	Chp 14 Chp 15	Mendel and the gene DNA synthesis	In-class quiz from topics covered in the previous workshop week
<b>July 18</b>		<b>LECTURE EXAM 3</b>		
July 19 July 21	Tue Thu	Chp 16 Chp 17	How Genes Work Transcription and Translation	In-class quiz from topics covered in the previous workshop week
July 26 July 28	Tue Thu	Chp 18 Chp 19	Gene Expression Gene Expression	In-class quiz from topics covered in the previous workshop week
Aug 2	Tue	NO WORKSHOP		
<b>Aug 3</b>		<b>LECTURE EXAM 4</b>		

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## Course Policies

<div>Grading Criteria</div>	<p>Student assessment is based on grades from 4 lecture class exams, Mastering Biology online homework assignments, workshop quizzes and class attendance/participation. Class attendance is mandatory, and completion of lecture exams, homework assignments and workshop quizzes are required to obtain successful course grade.</p> <p>Exams may consist of multiple choice questions, matching, true/false, labeling, and/or fill in the blank questions as well as short answer. Exam scores will be posted on eLearning. All exam and quiz grades are final upon 1 week of posting.</p> <p>If you do miss an exam or quiz, the score will be recorded as zero, "0". You must contact within 24 hours of the missed lecture exam to request a make-up exam, which can only be scheduled when excuse is documented. There is no retake for any exam. There is no make up for quiz.</p> <p>The percentages for the lecture exam and workshop assignments are:</p> <ul style="list-style-type: none"><li>• 60% lecture class exams</li><li>• 10% lecture class attendance/participation</li><li>• 15% Mastering Biology online homework</li><li>• 15% workshop attendance and quizzes</li></ul> <p>Grades are distributed as following:</p> <table><tr><td>97-100%</td><td>A+</td><td>75-78%</td><td>C+</td></tr><tr><td>92-96%</td><td>A</td><td>72-74%</td><td>C</td></tr><tr><td>89-91%</td><td>A-</td><td>69-71%</td><td>C-</td></tr><tr><td>85-88%</td><td>B+</td><td>65-68%</td><td>D+</td></tr><tr><td>82-84%</td><td>B</td><td>62-64%</td><td>D</td></tr><tr><td>79-81%</td><td>B-</td><td>59-61%</td><td>D-</td></tr><tr><td></td><td></td><td>&lt; 59 %</td><td>F</td></tr></table> <p>Final letter grades will be posted via Galaxy. You will receive the same letter grade in both BIOL 2311 (lecture) and BIOL 2111 (workshop).</p>	97-100%	A+	75-78%	C+	92-96%	A	72-74%	C	89-91%	A-	69-71%	C-	85-88%	B+	65-68%	D+	82-84%	B	62-64%	D	79-81%	B-	59-61%	D-			< 59 %	F
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		< 59 %	F																										
<div>Lecture Class and Workshop Attendance</div>	<p>Regular attendance to lecture and workshop classes is required. Principles that are fundamental to the structure and function of living systems are emphasized during lectures. While learning styles may be different, success in the course generally depends upon attendance and participation in the class meetings, asking questions, completing</p>																												

	<p>homework assignments, and reading the textbook chapters. Be diligent with your studies; it is difficult to “catch up” for an exam if you fall behind.</p> <p>Arriving to the classroom punctually and regular attendance to the class meetings is a part of your responsibility as student. Lateness or leaving the class early is not tolerated as it is disruptive to orderly and efficient conduct of the class. Students who establish a trend of habitual lateness/chronic tardiness or leaving the class early will be reported to the Dean of Students Office.</p>
<b>Use of Electronic Devices</b>	<p>Use of all electronic devices including laptop computers, cellular telephones, PDAs, headphones, pagers are distractive to teaching/learning process and not permitted. Such devices must be turned off and put away during lectures, workshops and exams.</p> <p>At the discretion of the Professor, laptop computers may be allowed during class only for taking notes, following the lecture slides, or occasional group discussions.</p> <p>Students who engage in use of electronic devices for activities unrelated to the learning experience will be reported to the Dean of Students Office for academic disciplinary action.</p>
<b>Make up Exams</b>	<p>Make-up exams will be given ONLY in case of documented excuses or emergencies such as in the event of illness (doctor’s note with clinic contact info required), official university business, or professional school interviews. Most "return to work" slips do not indicate that there was a sickness or emergency and they do not specify the date and reason for visit and diagnosis by a doctor or clinic. Thus you need to provide an official documentation indicating specifically the date and reason of admission to a clinic, or a documentation indicating attendance to a school interview, or demonstrating an extraordinary or emergency situation.</p> <p>Since religious holidays are known in advance, you must inform about them in the beginning of the semester.</p> <p>Make-up exams may be different from regular exams and may include a verbal component and/or drawing of structures. The highest grade possible on a make-up exam is the average of your other exams. Students should not be able to benefit from the extra time that other students do not have. Students can maintain their average but not improve upon it.</p>

<p><b>Field Trip Policies, Off-campus Instruction, and Course Activities</b></p>	<p>Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at the website address:</p> <p><a href="http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm">http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm</a>.</p> <p>Additional information is available from the office of the school dean. Below is a description of any travel and/or risk-related activity associated with this course.</p>
<p><b>Student Conduct and Discipline</b></p>	<p>The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, <i>A to Z Guide</i>, which is provided to all registered students each academic year.</p> <p>The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the <i>Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3</i>, and in Title V, Rules on Student Services and Activities of the university's <i>Handbook of Operating Procedures</i>. The rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).</p> <p>A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.</p>
<p><b>Academic Integrity</b></p>	<p>The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.</p>

	<p>Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.</p> <p>Cheating is a serious offense to the University's policy on intellectual dishonesty. I have and will continue to confront and punish scholastic dishonesty to the full extent of University Regulations.</p> <p>Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.</p> <p>Protect yourself by reviewing the following website:  <a href="http://www.utdallas.edu/judicialaffairs/">http://www.utdallas.edu/judicialaffairs/</a></p>
<b>Email Use</b>	<p>The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.</p>
<b>Withdrawal from Class</b>	<p>The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.</p>



<p><b>Student Grievance Procedures</b></p>	<p>Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's <i>Handbook of Operating Procedures</i>.</p> <p>In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.</p> <p>Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.</p>
<p><b>Incomplete Grades</b></p>	<p>As per university policy, incomplete grades will be granted only for work unavoidably missed at the end of semester and only if 70% of the course work has been completed.</p> <p>An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of <u>F</u>.</p>
<p><b>Disability Services</b></p>	<p>The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.</p>

	<p>The contact information for the Office of Disability Services is:  The University of Texas at Dallas, SU 22  PO Box 830688  Richardson, Texas 75083-0688  (972) 883-2098 (voice or TTY)</p> <p>Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.</p> <p>It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.</p>
<p><b>Religious Holy Days</b></p>	<p>The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.</p> <p>The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.</p> <p>If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a</p>

	reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.
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