

**BIOCHEMISTRY I – BIOL/CHEM 3361.002**  
**BIOCHEMISTRY WORKSHOP I – BIOL 3161.001 to 3161.014**  
**MODERN BIOCHEMISTRY I – BIOL 6352.001**  
**FALL 2016                      MW 10:00-11:15 am                      HH2.402**

| Instructor    | Room No.   | Telephone    | E-Mail                    | Office Hours           |
|---------------|------------|--------------|---------------------------|------------------------|
| Sheena D'Arcy | BSB 12.661 | 972-883-2915 | sheena.darcy@utdallas.edu | MW 2-3pm<br>BSB12.102J |
| Hyuntae Yoo   | BE 3.204A  | 972-883-4128 | hyuntae.yoo@utdallas.edu  | MW 2-3pm<br>BE 3.204A  |

**Co-requisites:** Concurrent registration in Biochemistry Workshop I (BIOL 3161 Sections 001 to 014) is required for both BIOL and CHEM 3361 students, but not BIOL 6352 students.

**Prerequisites:** CHEM 2323 and 2325 or equivalent.

**BIOL 6352 students:** If you have registered for Modern Biochemistry I under the graduate listing BIOL 6352, do not register for a workshop. (You may, however, pick any workshop and attend if you wish, and you are encouraged to do so.)

**Course description:** Structures and chemical properties of amino acids; protein purification and characterization; protein structure and thermodynamics of polypeptide chain folding; catalytic mechanisms, kinetics and regulation of enzymes; energetics of biochemical reactions; metabolism; roles of coenzymes and prosthetic groups in redox reactions; pathways for carbohydrate oxidation; glycogen metabolism; glucose synthesis; electron transport and oxidative phosphorylation.

**Objectives:** This undergraduate core course is the first of a two-course sequence that provides students with a working knowledge of the macromolecules and fundamental metabolic pathways of prokaryotes and eukaryotes, with emphasis on human systems. Biochemistry I is devoted to mastering 1) the structure and function of amino acids and proteins and 2) central metabolism and energy conservation, as a means of understanding biological processes in general and developing problem-solving skills in biochemistry. Fundamental thermodynamic principles that drive life processes and the regulatory mechanisms that fine-tune them are stressed in order to provide the rationale and framework for students to master the necessary molecular structure and pathways. Relevance to human physiology, medicine, and genetics is used to stimulate students to begin the integration of biochemistry with other disciplines.

**Outcomes:** Students will be able to:

1. Explain the basic thermodynamics governing biochemical reactions and use this information to solve problems involving biochemical thermodynamics.
2. Recognize the molecular structures and describe the chemical properties of proteins, their amino acid residues, and carbohydrates; and solve related pH problems.
3. Explain enzyme catalysis and regulation, and apply enzyme kinetics in problem solving.
4. Describe the central pathways for the catabolism of glucose and complex carbohydrates, and gluconeogenesis.
5. Understand the organization of electron transport chains, and the different mechanisms for ATP synthesis.

**Required textbook and OWLv2 access:** R.H. Garrett and C.M. Grisham: *Biochemistry*, 6<sup>th</sup> edition, with the option of online OWLv2, from Brooks/Cole, Cengage Learning. Online OWLv2 comprises learning modules and self-assessment problem sets, as well as electronic copies of the Garrett and Grisham text and the Student Solutions Manual. If you are satisfied with an e-text, you need only

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purchase the online OWLv2. If you additionally want a print copy of the text, it is available either hardbound or loose-leaf.

The options with OWLv2 are:

- Loose-leaf text + OWLv2 access for 24 months – ISBN 9781337130950 (Available at the UTD bookstore)
- Hardbound text + OWLv2 access for 24 months – ISBN 9781337194242
- Only OWLv2 access for 24 months – ISBN 9781305636279 (Printed card with access code available at the UTD bookstore) or ISBN 9781305636262 (Online access code directly from Cengage)

The options without OWLv2 are:

- Hardbound text – ISBN 9781305577206
- e-book text – ISBN 9781337359573

Be sure to purchase texts with these specific ISBNs.

**eLearning website:** From the UTD homepage, log onto the BIOL/CHEM 3361.002 eLearning website for class notes, problem sets, practice exams, announcements, your grades, etc. and to submit questions and communicate with other students in the class. Instructions for registering and logging onto the OWLv2 website also are posted on the class eLearning site.

**Supplemental Instruction (SI):** SI is offered for this course. SI sessions are free group study opportunities, scheduled three times per week. Sessions will be led by a recent outstanding biochem I student. Attendance is voluntary. For information about the days, times, and locations for SI sessions, go to [www.utdallas.edu/studentsuccess/leaders/si.html](http://www.utdallas.edu/studentsuccess/leaders/si.html) NB: Participants in the spring 2014 biochem SI sessions averaged one letter grade higher for the course than nonparticipants.

**Tutoring:** Peer tutoring for this course is offered by the UTD Student Success Center in MC 1.302. For information, go to <http://www.utdallas.edu/studentsuccess/leaders/index.html>

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## Class schedule FALL 2016

|            |             |                                                                                                             |                                                     |               |
|------------|-------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------|
| Mon        | 8/22        | Introduction, Weak Interactions                                                                             | Chap 1                                              | D'Arcy        |
| Wed        | 8/24        | Water and Acid/Base Properties                                                                              | Chap 2                                              | D'Arcy        |
| Mon        | 8/29        | Thermodynamics of Biological Systems                                                                        | Handout on eLearning as substitute for Chap 3       | D'Arcy        |
| Wed        | 8/31        | Thermodynamics of Biological Systems cont'd                                                                 | Handout on eLearning as substitute for Chap 3       | D'Arcy        |
| Mon        | 9/5         | <i>No lecture due to Labor Day holiday</i>                                                                  |                                                     |               |
| Wed        | 9/7         | Amino Acids                                                                                                 | Chap 4                                              | D'Arcy        |
| Wed        | 9/7         | <i>LAST DAY TO DROP WITHOUT A "W"</i>                                                                       |                                                     |               |
| Mon        | 9/12        | Protein Structure/Function Overview<br>Protein Purification and Characterization                            | Chap 4.7 & 5.1-5.2, 5.7-5.8                         | D'Arcy        |
| <b>Tue</b> | <b>9/13</b> | <b>Problem Set 1 Due by 5:00 pm</b><br><b>Collection box in FO 3.704</b><br><b>(No late sets accepted.)</b> |                                                     |               |
| Wed        | 9/14        | Protein Purification and Characterization cont'd                                                            | Chap 4.7 & 5.1-5.2, 5.7-5.8                         | D'Arcy        |
| <b>Mon</b> | <b>9/19</b> | <b>EXAM #1</b><br><b>Scantron form F-1712 will be provided</b>                                              | <b>Chaps 1- 4, 5.1, 5.2, 5.7, 5.8 &amp; handout</b> | <b>D'Arcy</b> |
| Wed        | 9/21        | Enzyme Kinetics                                                                                             | Chap 13                                             | D'Arcy        |
| Mon        | 9/26        | Inhibition Kinetics; Irreversible Inhibition<br>Bisubstrate Kinetics                                        | Chap 13                                             | D'Arcy        |
| Wed        | 9/28        | Enzyme Mechanisms                                                                                           | Chap 14                                             | D'Arcy        |
| Mon        | 10/3        | Enzyme Mechanisms cont'd                                                                                    | Chap 14                                             | D'Arcy        |

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|            |              |                                                                                                                                      |                                                                        |               |
|------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------|
| Wed        | 10/5         | Proteins: Primary Structure and Sequencing<br>Protein Secondary, Tertiary and Quaternary Structure                                   | Chap 4.7, 5.3-5.6, 6                                                   | D'Arcy        |
| Mon        | 10/10        | Protein Secondary, Tertiary and Quaternary Structure cont'd<br>Protein Denaturants; Protein Folding and Folding Diseases; Chaperones | Chap 6 & Chap 31.1 on pp 1132-1140                                     | D'Arcy        |
| <b>Mon</b> | <b>10/10</b> | <b>Problem Set 2 Due by 5:00 pm</b><br><b>Collection box in FO 3.704</b><br><b>(No late sets accepted.)</b>                          |                                                                        |               |
| Wed        | 10/12        | <b>EXAM #2</b><br>Scantron form F-1712 will be provided                                                                              | <b>Chaps 4.7, 5.3-5.6, 6, 13, 14, Chap 31.1</b><br><b>pp 1132-1140</b> | <b>D'Arcy</b> |
| Mon        | 10/17        | Enzyme Regulation; Mechanisms of Allostery                                                                                           | Chap 15                                                                | Yoo           |
| Wed        | 10/19        | Allostery in hemoglobin                                                                                                              | Chap 15                                                                | Yoo           |
| Mon        | 10/24        | Overview of Metabolism: Catabolism and Anabolism                                                                                     | Chap 17                                                                | Yoo           |
| Wed        | 10/26        | Carbohydrates                                                                                                                        | Chap 7                                                                 | Yoo           |
| Thurs      | 10/27        | <i>LAST DAY TO WITHDRAW FROM UG COURSE</i>                                                                                           |                                                                        |               |
| Mon        | 10/31        | Glycolysis: First Phase                                                                                                              | Chap 18                                                                | Yoo           |
| Wed        | 11/2         | Glycolysis: Second Phase                                                                                                             | Chap 18                                                                | Yoo           |
| Mon        | 11/7         | Gluconeogenesis                                                                                                                      | Chap 22 (part 1)                                                       | Yoo           |
| Mon        | 11/7         | <i>LAST DAY TO WITHDRAW FROM GRAD COURSE</i>                                                                                         |                                                                        |               |
| <b>Mon</b> | <b>11/7</b>  | <b>Problem Set 3 Due by 5:00 pm</b><br><b>Collection box in FO 3.704</b><br><b>(No late sets accepted.)</b>                          |                                                                        |               |
| Wed        | 11/9         | <b>EXAM #3</b><br>Scantron form F-1712 will be provided                                                                              | <b>Chaps 7, 15, 17,18, 22 (part 1)</b>                                 | <b>Yoo</b>    |
| Mon        | 11/14        | Glycogen Metabolism and Pentose Phosphate Pathway                                                                                    | Chap 22 (part 2)                                                       | Yoo           |

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|            |             |                                                                                                             |                                  |            |
|------------|-------------|-------------------------------------------------------------------------------------------------------------|----------------------------------|------------|
| Wed        | 11/16       | The Tricarboxylic Acid Cycle                                                                                | Chap 19                          | Yoo        |
| Mon        | 11/21       | <i>No lecture due to Fall Break</i>                                                                         |                                  |            |
| Wed        | 11/23       | <i>No lecture due to Fall Break</i>                                                                         |                                  |            |
| Mon        | 11/28       | The Tricarboxylic Acid Cycle and the Glyoxylate Shunt                                                       | Chap 19                          | Yoo        |
| Wed        | 11/30       | Electron Transport                                                                                          | Chap 20                          | Yoo        |
| Mon        | 12/5        | Electron Transport                                                                                          | Chap 20                          | Yoo        |
| Wed        | 12/7        | ATP synthesis                                                                                               | Chap 20                          | Yoo        |
| <b>Wed</b> | <b>12/7</b> | <b>Problem Set 4 Due by 5:00 pm</b><br><b>Collection box in FO 3.704</b><br><b>(No late sets accepted.)</b> |                                  |            |
| <b>TBA</b> | <b>TBA</b>  | <b>FINAL: EXAM #4</b><br><b>Scantron form F-1712 will be provided</b>                                       | <b>Chaps 19, 20, 22 (part 2)</b> | <b>Yoo</b> |

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**Teaching Assistants**

|                         |                                                                    |
|-------------------------|--------------------------------------------------------------------|
| Laila Abbas             | <a href="mailto:lfa140030@utdallas.edu">lfa140030@utdallas.edu</a> |
| Adnin Ashrafi           | <a href="mailto:axa131530@utdallas.edu">axa131530@utdallas.edu</a> |
| Vandita Bhat            | <a href="mailto:vxb140930@utdallas.edu">vxb140930@utdallas.edu</a> |
| Anthony Dao             | <a href="mailto:agd140030@utdallas.edu">agd140030@utdallas.edu</a> |
| Razaq Durudoye          | <a href="mailto:rod150030@utdallas.edu">rod150030@utdallas.edu</a> |
| Kirollos Eskander       | <a href="mailto:kxs130030@utdallas.edu">kxs130030@utdallas.edu</a> |
| Marc Gallenito          | <a href="mailto:mfg150130@utdallas.edu">mfg150130@utdallas.edu</a> |
| Daniel Gelvez           | <a href="mailto:dxg140230@utdallas.edu">dxg140230@utdallas.edu</a> |
| Sangeeth George         | <a href="mailto:ssg130130@utdallas.edu">ssg130130@utdallas.edu</a> |
| Adam Howard             | <a href="mailto:ath130030@utdallas.edu">ath130030@utdallas.edu</a> |
| Lauren Jones            | <a href="mailto:lej130230@utdallas.edu">lej130230@utdallas.edu</a> |
| Alexandra Lasley        | <a href="mailto:acl130130@utdallas.edu">acl130130@utdallas.edu</a> |
| Chao Long               | <a href="mailto:cxl135330@utdallas.edu">cxl135330@utdallas.edu</a> |
| Gino Occhialini         | <a href="mailto:geo130030@utdallas.edu">geo130030@utdallas.edu</a> |
| Prithwijit Sarkar       | <a href="mailto:pxs155830@utdallas.edu">pxs155830@utdallas.edu</a> |
| Vaishnavi 'Veena' Singh | <a href="mailto:vxs130530@utdallas.edu">vxs130530@utdallas.edu</a> |
| Naveen Subramanian      | <a href="mailto:ngs140030@utdallas.edu">ngs140030@utdallas.edu</a> |
| Cina Tavanaei           | <a href="mailto:cxt130530@utdallas.edu">cxt130530@utdallas.edu</a> |
| Ailing Yang             | <a href="mailto:aey120030@utdallas.edu">aey120030@utdallas.edu</a> |
| Bo Zhang                | <a href="mailto:bxz110730@utdallas.edu">bxz110730@utdallas.edu</a> |

**Workshop Sections**

BIOCHEMISTRY WORKSHOP I BIOL 3161.001 to 3161.014

You are free to attend any section.

| Section | Day | Time                | Room      | TA                 |
|---------|-----|---------------------|-----------|--------------------|
| Sec 001 | F   | 12:00 PM – 12:50 PM | FO 3.616  | Daniel Gelvez      |
| Sec 002 | F   | 12:00 PM – 12:50 PM | FN 2.106  | Veena Singh        |
| Sec 003 | Tu  | 8:30 AM – 9:20 AM   | SLC 2.304 | Razaq Durudoye     |
| Sec 004 | W   | 12:00 PM – 12:50 PM | FO 3.616  | Ailing Yang        |
| Sec 005 | M   | 2:00 PM – 2:50 PM   | FN 2.106  | Kirollos Eskander  |
| Sec 006 | W   | 2:00 PM – 2:50 PM   | FO 3.616  | Cina Tavanaei      |
| Sec 007 | M   | 4:00 PM – 4:50 PM   | FO 3.616  | Adam Howard        |
| Sec 008 | W   | 4:00 PM – 4:50 PM   | FO 3.616  | Anthony Dao        |
| Sec 009 | M   | 12:00 PM – 12:50 PM | FN 2.106  | Laila Abbas        |
| Sec 010 | W   | 8:00 AM – 8:50 AM   | FO 3.616  | Naveen Subramanian |
| Sec 011 | R   | 8:30 AM – 9:20 AM   | SLC 2.304 | Sangeeth George    |
| Sec 012 | W   | 12:00 PM – 12:50 PM | FO 3.616  | Gino Occhialini    |
| Sec 013 | F   | 4:00 PM – 4:50 PM   | FO 3.616  | Lauren Jones       |
| Sec 014 | F   | 2:00 PM – 2:50 PM   | FN 2.106  | Marc Gallenito     |

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**Workshop Schedule**

|                                    |                      |                                                                                             |
|------------------------------------|----------------------|---------------------------------------------------------------------------------------------|
| Mon–Fri                            | 8/22 – 8/26          | pH calculations, HH equation                                                                |
| Mon–Fri                            | 8/29 – 9/2           | pH calculations, Thermodynamics                                                             |
| <i>Mon<br/>(Labor Day Holiday)</i> | <i>9/5</i>           | <i>Students in the Monday workshops need to attend one of the other workshops this week</i> |
| Tues–Fri                           | 9/6 – 9/9            | Thermodynamics ; Protein purification                                                       |
| <i>Mon–Fri</i>                     | <i>9/12 – 9/16</i>   | <i>Exam week - Only Monday workshops meet</i>                                               |
| Mon–Fri                            | 9/19 – 9/23          | Enzyme kinetics                                                                             |
| Mon–Fri                            | 9/26 – 9/30          | Enzyme kinetics; Enzyme mechanisms                                                          |
| Mon–Fri                            | 10/3 – 10/7          | Protein structure                                                                           |
| <i>Mon–Fri</i>                     | <i>10/10 – 10/14</i> | <i>Exam week - No workshops</i>                                                             |
| Mon–Fri                            | 10/17 – 10/21        | Enzyme regulation                                                                           |
| Mon–Fri                            | 10/24 – 10/28        | Metabolism; Carbohydrates                                                                   |
| Mon–Fri                            | 10/31 – 11/4         | Glycolysis and Gluconeogenesis                                                              |
| Mon–Fri                            | 11/7 – 11/11         | Glycogen metabolism                                                                         |
| Mon–Fri                            | 11/14 – 11/18        | TCA cycle                                                                                   |
| <i>Mon–Fri</i>                     | <i>11/21 – 11/25</i> | <i>Fall Break – No workshops</i>                                                            |
| Mon–Fri                            | 11/28 – 12/2         | Electron transport and ATP synthesis                                                        |
| <i>Mon–Wed</i>                     | <i>12/5 – 12/7</i>   | <i>No Workshops</i>                                                                         |

**Grading:** Four (4) class-period exams (20% each, 80% total) + adjusted workshop problem set/online OWLv2 score (20%, see below).

**Workshop Problem Sets:** There will be four assigned problem sets, which will be posted successively online at eLearning, starting at the beginning of the semester and immediately after each examination. Completed problems must be **turned in by the following dates and times:**

**Set 1 Tuesday Sept. 13 by 5:00 PM**

**Set 2 Monday Oct. 10 by 5:00 PM**

**Set 3 Monday Nov. 7 by 5:00 PM**

**Set 4 Wednesday Dec. 7 by 5:00 PM**

These due dates were set to allow all students to meet the same number of lecture and workshop sessions before each turn-in date. On these dates the problems sets will be **due by**

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**5:00 PM. A collection box is in FO 3.704.** You may also turn in your problems sets before the due date at lecture or in workshop. **For full credit, all steps to the solution of problems must be shown.** Complete answers to problems will be posted on eLearning immediately following the due date. **If you have a question regarding the grading of your problem sets, first contact the graduate TA in charge of the grading.**

**OWLv2 Assignments:** There will be chapter mastery questions and self-assessment problems to be completed online at the text publisher's OWLv2 website for each of the 15 chapters we will cover. To register and log in go to [login.cengagebrain.com](http://login.cengagebrain.com). You will need an access code bundled together with your text or purchased separately. If you need an ID, use your UTD net ID. **Instructions for registering and logging onto the OWLv2 website** are posted on the class eLearning site. The OWLv2 questions and problems for the 15 chapters will be divided into 4 sets, due online successively at the same time as the Workshop Problem Sets I. The composite score for all OWLv2 mastery questions and self-assessment problems will be counted as equivalent to one workshop problem set score.

**Adjusted workshop problem-set/OWLv2 score:** Your workshop problem-set/OWLv2 average will be calculated after dropping the lowest of the five scores.

**\*Grades-** At the end of the semester an average of your four exam scores plus your adjusted problem-set score will be computed and scaled between 0 and 100 points. Your final letter grade will be no worse than that based on the following scale:

| Letter Grade | Score Range |
|--------------|-------------|
| A- to A+     | 85-100      |
| B- to B+     | 75-84       |
| C- to C+     | 65-74       |
| D- to D+     | 55-64       |
| F            | < 55        |

If your final mean numerical score is fractional it will be rounded off to the nearest integer value: i.e., 0.5 - 0.9 will be rounded up to the next highest whole number. In other words 85.5 would be rounded to 86 and the student would receive an A grade, but 85.4 would be rounded to 85 and the student would receive a B grade.

**You will receive the same letter grade in both BIOL/CHEM 3361 and BIOL 3161.**

### **Course Policies**

**Make-up exams:** There will be no make-up exams except for the most extreme of documented circumstances or for religious holidays as described under University Policy below. If you do miss an exam, the score will be recorded as 0.

**Problem Sets:** Problem sets **will not be accepted after the due dates.** If you do miss a due date, the score will be recorded as 0.

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**Use of portable electronics:** Cellular telephones and pagers must be turned off and put away during lectures and exams. Any cellphone use during an exam will be considered grounds for a charge of academic dishonesty. Laptops and tablets may be used, but for class-related activities only. Programmable calculators used for exams must have their memory cleared and may be checked for this during exams.

**eLearning:** Notes and slides used in lecture, problem sets, class announcements, scores, and practice exams will be posted on eLearning, which is accessible through Orion on the UTDallas Homepage.

**BIOL 6352 students:** Examinations will consist of two parts: one part that is substantially similar to that taken by undergraduate students enrolled in the class and a second part that will contain one or more additional problems.

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**UT Dallas Policies and Procedures**

The following sections are University policies applicable to this course. The complete policies and Procedures and updates can be found at: <http://go.utdallas.edu/syllabus-policies>

**Sharing Confidential Information**

Students considering sharing personal information in email, in person, or within assignments or exams should be aware that faculty members and teaching/research assistants are required by UT Dallas policy to report information about sexual misconduct to the UT Dallas Title IX Coordinator. Per university policy, faculty have been informed that they must identify the student to the UT Dallas Title IX Coordinator. Students who wish to have confidential discussions of incidents related to sexual harassment or sexual misconduct should contact the Student Counseling Center (972-883-2527 or after hours 972-UTD-TALK or 972-883-8255), the Women's Center (972-883-8255), a health care provider in the Student Health Center (972-883-2747), the clergyperson (or other legally recognized religious advisor) of their choice, or an off-campus resource (i.e., rape crisis center, doctor, psychologist). Students who are sexually assaulted, harassed, or victims of sexual misconduct, domestic violence, or stalking, are encouraged to directly report these incidents to the UT Dallas Police Department at 972-883-2222 or to the Title IX Coordinator at 972-883-2218. Additional information and resources may be found at <http://www.utdallas.edu/oiec/title-ix/resources>.

**Technical Support**

If you experience any issues with your UT Dallas account, contact the UT Dallas Information Resources Help Desk: [assist@utdallas.edu](mailto:assist@utdallas.edu) or call 972-883-2911.

UT Dallas provides eLearning technical support 24 hours a day/7 days a week. The services include a toll free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service. Please use this link to access the UTD eLearning Support Center: <http://www.utdallas.edu/elearninghelp>.

**Student Conduct and Discipline**

The University of Texas System (Regents' Rule 50101) 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 UT Dallas online catalogs (<http://catalog.utdallas.edu>).

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 Student Discipline and Conduct, UTDSP5003 (<http://policy.utdallas.edu/utdsp5003>). 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 (SSB 4.400, 972-883-6391) and online at <http://www.utdallas.edu/deanofstudents>.

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A student at the University neither loses their 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 its standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

### **Academic Integrity**

Academic Dishonesty: 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 demonstrates a high standard of individual honor in his or her scholastic work.

Academic dishonesty can occur in relation to any type of work submitted for academic credit or as a requirement for a class. It can include individual work or a group project. Academic dishonesty includes, plagiarism, cheating, fabrication and collaboration/collusion. In order to avoid academic dishonesty, it is important for students to fully understand the expectations of their professors. This is best accomplished through asking clarifying questions if an individual does not completely understand the requirements of an assignment.

Additional information related to academic dishonesty and tips on how to avoid dishonesty may be found here: <http://www.utdallas.edu/deanofstudents/maintain>.

### **Copyright Notice**

It is the policy of the University of Texas at Dallas to adhere to the requirements of the United States Copyright Law of 1976, as amended, (*Title 17, United States Code*), including ensuring that the restrictions that apply to the reproduction of software are adhered to and that the bounds of copying permissible under the fair use doctrine are not exceeded. Copying, displaying, reproducing, or distributing copyrighted material may infringe upon the copyright owner's rights. Unauthorized distribution of copyrighted material, including unauthorized peer-to-peer file sharing, may subject students to appropriate disciplinary action as well as civil and criminal penalties. Usage of such material is only appropriate when that usage constitutes "fair use" under the Copyright Act. For more information about the fair use exemption, see <http://copyright.lib.utexas.edu/copypol2.html>. As a UT Dallas student, you are required to follow UT Dallas' copyright policy (UTDPP1043 at <http://policy.utdallas.edu/utdpp1043>) and the UT System's policy at <http://www.utsystem.edu/ogc/intellectualproperty/copyrighthome.htm>.

### **Email Use**

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. All official student email correspondence will be sent only to a student's UT Dallas email address and UT Dallas will only consider email requests originating from an official UT Dallas student email account. This allows the University to maintain a high degree of confidence in the identity of each individual's corresponding via email and the security of the transmitted information. The University of Texas at Dallas furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources

**BIOCHEMISTRY I – BIOL/CHEM 3361.002**  
**BIOCHEMISTRY WORKSHOP I – BIOL 3161.001 to 3161.014**  
**MODERN BIOCHEMISTRY I – BIOL 6352.001**

provides a method for students to have their UT Dallas mail forwarded to other email accounts. To activate a student UT Dallas computer account and forward email to another account, go to <http://netid.utdallas.edu>.

### **Class Attendance**

Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty.

### **Withdrawal from Class**

The administration at UT Dallas has established deadlines for withdrawal from any course. These dates and times are published in the Comet Calendar (<http://www.utdallas.edu/calendar>) and in the Academic Calendar (<http://www.utdallas.edu/academiccalendar>). It is the student's responsibility to handle withdrawal requirements from any class. In other words, a professor or other instructor cannot drop or withdraw any student unless there is an administrative drop such as the following:

- Have not met the prerequisites for a specific course
- Have not satisfied the academic probationary requirements resulting in suspension
- Judicial affairs request
- Have not made appropriate tuition and fee payments
- Enrollment is in violation of academic policy
- Was not admitted for the term in which they registered

It is the student's responsibility to complete and submit the appropriate forms to the Registrar's Office and ensure that he or she will not receive a final grade of "F" in a course if he or she chooses not to attend the class after being enrolled.

### **Student Grievance Procedures**

Procedures for student grievances are found in university policy UTDSP5005 (<http://policy.utdallas.edu/utdsp5005>). In attempting to resolve any student grievance regarding disputes over grades, application of degree plan, graduation/degree program requirements, and thesis/and dissertation committee, advisor actions and/or decisions, evaluations, and/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 originated.

### **Incomplete Grade Policy**

As per university policy, incomplete grades may be given, at the discretion of the instructor of record for a course, when a student has completed at least 70% of the required course material but cannot complete all requirements by the end of the semester. An incomplete course grade (grade of 'I') must be resolved completed within the time period specified by the instructor, not to exceed eight (8) weeks from the first day of the subsequent long semester. Upon completion of the required work, the symbol 'I' may be converted into a letter grade (A through F). If the grade of Incomplete is not removed by the end of the specified period, it will automatically be changed to F.

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### **AccessAbility Services**

It is the policy and practice of The University of Texas at Dallas to make reasonable disability-related accommodations and/or services for students with documented disabilities. However, written notification from the Office of Student AccessAbility (OSA) is required (see <http://www.utdallas.edu/studentaccess>). If you are eligible to receive disability-related accommodations and/or services and to ensure accommodations will be in place when the academic semester begins, students are encouraged to submit documentation four to six weeks in advance. Students who have questions about receiving accommodations, or those who have, or think they may have, a disability (mobility, sensory, health, psychological, learning, etc.) are invited to contact the Office of Student AccessAbility for a confidential discussion.

The Office of Student AccessAbility provides:

1. Academic accommodations for eligible students with a documented permanent physical, mental or sensory disability
2. Facilitation of non-academic and environmental accommodations and services
3. Resources and referral information, and advocacy support as necessary and appropriate.

OSA is located in the Student Services Building, suite 3.200. They can be reached by phone at 972-883-2098, or by email at [studentaccess@utdallas.edu](mailto:studentaccess@utdallas.edu).

### **Religious Holy Days**

The University of Texas at Dallas will excuse a student from class or other required activities, including examinations and travel time for the observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, of the *Texas Tax Code*.

Students are encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment.

Excused students will be allowed to take missed exams or complete assignments 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.

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 reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the President of UT Dallas or from the President's designee. The chief executive officer or designee must take into account the legislative intent of *Texas Education Code 51.911(b)*, and the student and instructor will abide by the decision of the chief executive officer or designee.

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**Resources to Help You Succeed**

The Office of Student Success operates the Student Success Center (SSC, <http://www.utdallas.edu/studentsuccess>), which offers assistance to students in the areas of writing, mathematics, communication, multiple science fields, reading, study skills, and other academic disciplines. These services are available through individual and small group appointments, workshops, short courses, and a variety of online and instructional technologies. All students enrolled at UT Dallas are eligible for these services.

The **Peer Tutoring** program offers free tutoring assistance in multiple locations for many of the historically challenging undergraduate subjects at UT Dallas. Tutoring sessions, offered every weekday on a drop-in basis, are one-on-one or in a small group format. The sessions are designed to meet students' individual questions and needs related to course/subject concepts. All peer tutors are current UT Dallas students who made an A- or better in the course and have a strong faculty/staff recommendation. Students should check the Student Success Center website each semester for subject offerings and session times.

**Supplemental Instruction (SI)** provides free, peer-facilitated weekly study sessions for students taking historically difficult courses. SI sessions encourage active, collaborative learning based on critical thinking and transferable study skills. SI leaders attend lectures, take notes, and read assigned material just like the enrolled students. Students should check the SSC website for subject and session times.

**Success Coaches** are available for individual student appointments to discuss study skills, time management, note taking, test taking and preparation, and other success strategies.

The Student Success Center's main office is located in the McDermott Library Building and can be contacted by calling 972-883-6707 or by sending an email to [ssc@utdallas.edu](mailto:ssc@utdallas.edu).