

**COLLIN COUNTY COMMUNITY COLLEGE DISTRICT  
LECTURE SECTION SYLLABUS**

**COURSE NUMBER** BIOL 1406

**COURSE TITLE** General Biology I

**COURSE DESCRIPTION**

For science majors. Current knowledge in the fundamentals of biology from the molecular to cellular level of organization. General topics covered include basic biochemistry, metabolism, energetics, cell structure, DNA, genetics, viruses, and bacteria. Lab required. Prerequisite: Pass reading requirement of TSI; high school chemistry is recommended. 4 credit hours.

**CREDIT HOURS:** 4 **LECTURE HOURS:** 3 **LAB HOURS:** 3

**PRE-REQUISITE** None

**CO-REQUISITE** BIOL 1406 Laboratory

**COLLEGE REPEAT POLICY**

A student may repeat this course only once after receiving a grade, including "W".

**COURSE DELIVERY METHOD**

Lectures will be combined with group discussions, and alternative learning methods (slides, transparencies, films, etc.) will be used to augment lecture topics.

**TEXTBOOK**

Biology, 8th ed., Campbell

**SUPPLIES**

None

**STUDENT LEARNING OUTCOMES**

1. Describe the metabolic processes that occur within the cells.
2. Compare eukaryotic and prokaryotic cell structure.
3. Describe the process of cell replication.
4. Explain how diversity is genetically based.
5. Discuss natural selection.
6. Demonstrate the collection, analysis, and reporting of data using the scientific method.

**COURSE REQUIREMENTS**

Lecture exams will be scheduled covering the text and lecture topics. The laboratory grade will be integrated with the lecture grade to produce the overall course grade at the end of the semester.

**METHOD OF EVALUATION**

Overall course grade: Lecture 75%, lab 25%

Lecture: major exams  
quizzes as determined by the instructor

**ATTENDANCE POLICY**

Lecture attendance is mandatory. Individual conflicts with this policy are to be discussed with the instructor. Students who stop attending class and do not officially withdraw from the course will be assigned a grade of "F". **Religious Holy Days:** please refer to the current Collin Student Handbook. The last day to withdraw is **10/16/09**.

## **AMERICAN DISABILITIES ACT STATEMENT**

It is the policy of Collin County Community College to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to contact the ACCESS office, SCC-G200 or 972.881.5898 (V/TTD: 972.881.5950) in a timely manner to arrange for appropriate accommodations.

## **ACADEMIC ETHICS**

The College District may initiate disciplinary proceedings against a student accused of scholastic dishonesty. 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 material that is not one's own. Scholastic dishonesty may involve, but is not limited to, one or more of the following acts: cheating, plagiarism, collusion, use of annotated texts or teacher's editions, and/or falsifying academic records.

Plagiarism is the use of an author's words or ideas as if they were ones own without giving credit to the source, including, but not limited to, failure to acknowledge a direct quotation.

Cheating is the willful giving or receiving of information in an unauthorized manner during an examination, illicitly obtaining examination questions in advance, copying computer or Internet files, using someone else's work for assignments as if it were one's own, or any other dishonest means of attempting to fulfill the requirements of a course.

Collusion is intentionally aiding or attempting to aid another in an act of scholastic dishonesty, including but not limited to, providing a paper or project to another student; providing an inappropriate level of assistance; communicating answers to a classmate during an examination; removing tests or answer sheets from a test site, and allowing a classmate to copy answers.

Contact the Dean of Students for the student disciplinary process and procedures or consult the CCCC Student Handbook.

## **STUDENT CONDUCT**

The college expects students to conduct themselves in class in such a way as to not interfere with or disrupt the educational process. Students are to speak and act in a respectful manner toward their fellow students and the professor. Those who participate in inappropriate behavior such as, excessive talking, cell phone or pager use, verbal altercations, or blatantly disregarding instructor's directions will be asked to leave the class. Continuation of such behavior will result in permanent removal.

## **LATERAL TRANSFER POLICY**

Lateral transfers will not be granted after the 4th week of class or after the first lecture exam, which ever comes first. Exceptions to this are for documented changes in work schedule or family emergencies. If a student does transfer to another section, all previous grades will accompany the student. However, the new instructor can require the student to retake any exam or quiz. For questions concerning this policy, contact the Biology Department Chair.

## **WITHDRAWAL POLICY - Course Drop Limit Provisions**

Students who enroll as an entering freshman or a first-time college student in undergraduate courses at any Texas public community college, technical institute, health sciences institution, or any public university offering undergraduate courses must comply with the legislation of TEC51.907. TEC51.907 states that students who enroll for the first time during the fall 2007 semester or any subsequent semester are subject to the course drop limit of six course drops. This includes any course a transfer student has dropped at another institution. Collin College will not begin to count dropped courses until the fall 2008 semester.

**NOTE:** You will not be allowed to withdraw from classes at Collin if your official transcripts (required for admission) are not on file.

For more information go to <http://www.ccccd.edu/aro/withdrawal.htm>.

## **IF YOU HAVE DIFFICULTIES**

First contact your instructor. If you are unable to resolve the problem, contact the divisional secretary at your campus.

**BIOLOGY 1406 - GENERAL BIOLOGY I LECTURE  
TENTATIVE COURSE CALENDAR**

<b>WEEK</b>	<b>LECTURE TOPICS</b>	<b>CHAPTERS</b>
1	Science of Biology	1
2	Basic Chemistry	2
	Water	3
3	<b>***Labor Day Holiday 9/7***</b>	
	Carbon Chemistry	4
4	Macromolecules	5
5	The Cell	6
6	Membrane Structure and Function	7
7	Metabolism	8
8	Cellular Respiration	9
	<b>*** Last Day to Withdraw 10/16***</b>	
9	Photosynthesis	10
	Cell Communication	11
10	Mitosis	12
	Meiosis	13
11	Mendelian Inheritance & Human Genetics	14 & 15
12	DNA Structure & Replication	16
13	Protein Synthesis	17
	Regulation of Gene Expression	18
14	Viruses	19
	<b>***Thanksgiving Holiday 11/25-11/29 Campuses Closed***</b>	
15	DNA Technology	20
	Prokaryotes	27
16	<b>Finals</b>	

**COLLIN COUNTY COMMUNITY COLLEGE DISTRICT  
LABORATORY SECTION SYLLABUS**

**COURSE NUMBER** BIOL 1406

**COURSE TITLE** General Biology I

**COURSE DESCRIPTION**

For science majors. Current knowledge in the fundamentals of biology from the molecular to cellular level of organization. General topics covered include basic biochemistry, metabolism, energetics, cell structure, DNA, genetics, viruses, and bacteria. Lab required. Prerequisite: Pass reading requirement of TSI; high school chemistry is recommended. 4 credit hours.

**CREDIT HOURS:** 4 **LECTURE HOURS:** 3 **LAB HOURS:** 3

**PRE-REQUISITE** None

**CO-REQUISITE** BIOL 1406 Lecture

**COLLEGE REPEAT POLICY**

A student may repeat this course only once after receiving a grade, including "W".

**COURSE DELIVERY METHOD**

Laboratory experiments will be mainly student participation, with some instructor demonstrations. Discussions of material covered in lab will precede or follow the lab topics. Films and other audio-visual materials may be used.

**TEXTBOOK FOR LABORATORY**

CCCCD Biology Laboratory Manual

**SUPPLIES**

Loose-leaf notebook to keep lab reports and handouts  
Labcoat or apron and latex gloves, if desired, for some labs

**STUDENT LEARNING OUTCOMES**

1. Describe the metabolic processes that occur within the cells
2. Compare eukaryotic and prokaryotic cell structure
3. Describe the process of cell replication
4. Explain how diversity is genetically based
5. Discuss natural selection.
6. Demonstrate the collection, analysis, and reporting of data using the scientific method

**COURSE REQUIREMENTS**

The laboratory will have two comprehensive practical examinations, in addition to quizzes and formal lab reports.

**METHOD OF EVALUATION**

Overall course grade: Lecture 75%, lab 25%

Lab: 2 practical exams - 30% each  
quizzes - 20% of lab grade  
lab reports - 20% of lab grade

**ATTENDANCE POLICY**

Laboratory attendance is mandatory. **Lab make-ups are only possible the week of the lab**, and the student must have permission to attend another lab. If a student misses one of the practical exams, they must make-up the exam. Instructors cannot count one practical exam grade twice. Contact your instructor immediately if you fail to take one of the practical exams. Students who stop attending class and do not officially withdraw from the course will be assigned a grade of "F".

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## **LAB POLICIES AND PROCEDURES**

No eating or drinking of any kind is allowed in the lab. Proper dress is required at all times. This includes no open toed shoes. An instructor has the right to ask a student that is improperly dressed to leave the lab or modify how they are dressed.

## **IF YOU HAVE DIFFICULTIES**

First contact your instructor. If you are unable to resolve the problem, contact the divisional secretary at your campus.

**BIOLOGY 1406 - GENERAL BIOLOGY I LABORATORY  
TENTATIVE COURSE CALENDAR**

WEEK	LABORATORY TOPICS	EXERCISES
1	Measurement	Unit 1
2	Scientific Method Spectrophotometry	Unit 2 Unit 3
3	<b>***Labor Day Holiday 9/7***</b> Acids, Bases, pH	Unit 4
4	Macromolecules	Unit 5
5	Microscopy and Cytology	Unit 7
6	Osmosis and Diffusion	Unit 6
7	<b>Lab Practical I</b>	
8	Enzymes	Unit 8
	<b>*** Last Day to Withdraw 10/16***</b>	
9	Cellular Respiration	Unit 9
10	Photosynthesis	Unit 10
11	Cell Division	Unit 11
12	Biotechnology	Unit 13
13	Prokaryotes	Unit 14
14	<b>No Labs Scheduled</b> <b>***Thanksgiving Holiday 11/25-11/29 Campuses Closed***</b>	
15	<b>Lab Practical II</b>	