### Course/Catalog Description
A survey of major biological principles and phenomena in various plants and animals with emphasis on man. (not for major credit).

### Course Overview
This course is designed as a survey of biology for the non-science major. The field of biology is very wide ranging from biochemistry, cells, cellular functions, genetics, physiology, evolution, and ecology. You are constantly forced to make decisions in your daily life based on your knowledge and understanding of biology and science. We will investigate a number of topics (such as cancer, diabetes, and agriculture) and the biology you need to understand them. You will do more than memorize facts. You will learn how science works.

### Student Learning Outcomes
Upon completion of this course, the student will be able to:

1. Demonstrate a general understanding of the basic principles of biology.
2. Employ the methods of inquiry characteristic of natural sciences.
3. Examine biological issues of concern to the public.

### Teaching Strategies
This fully online course is designed to stimulate student learning through the web-based delivery of readings, video, and audio, as well as collaborative activities involving asynchronous discussion. No on-campus meetings will be required.

### Workweek
In this fully online course, weeks run from Mondays through Sundays: specifically, they begin at 12:01 AM Monday morning and end at 11:59 PM on Sunday night. All assigned work for any week is to be completed by the end of Sunday in that week. The materials for any week will be posted by Monday morning of that week, if not earlier, under the appropriate folder. Begin each week on Monday by checking the schedule and then viewing the content for the week under Weekly Content.

### Prerequisites
Course prerequisites are ENGL 1100 or 1110 or HON1010.
TECHNICAL SKILLS
To succeed in this course, it will be important for learners to possess the following technical skills:

1. Rename, delete, organize, and save files.
2. Create, edit, and format word processing and presentation documents.
3. Copy, paste, and use a URL or web address.
4. Download and install programs and plug-ins.
5. Send and receive email with attachments.
6. Locate and access information using a web search engine.
7. Use chat or IM software for real-time communication.
8. Use a learning management system.

REQUIRED TEXTS AND MATERIALS
Our class will use Concepts of Biology from Open Stax College. This is a FREE textbook. It is available as a free download that can be viewed online, offline or printed. It is also available for purchase as a paper version. Use this link for your options https://openstaxcollege.org/textbooks/concepts-of-biology/get

TECHNOLOGY REQUIREMENTS
Browser Check Page
Students need to have access to a properly functioning computer throughout the semester. The Browser Check Page will enable you to perform a systems check on your browser, and to ensure that your browser settings are compatible with Blackboard, the course management system that hosts this course.

Software
Student computers need to be capable of running the latest versions of plug-ins, recent software and have the necessary tools to be kept free of viruses and spyware. The computer needs to run the following software, available in the Online Learning Download Center:

- Word Processing Software
- Adobe Acrobat Reader
- Apple QuickTime Player
- Java Plugin Console
- Adobe Flash Player
- Adobe Shockwave Player
- Mozilla Firefox Browser - Recommended

Internet Service
High-speed Internet access is recommended as dial-up may be slow and limited in downloading information and completing online tests. This course does contain streaming audio and video content.

Use of Public Computers
If using a public library or other public access computer, please check to ensure that you will have access for the length of time required to complete tasks and tests. A list and schedule for on-campus computer labs is available on the Open Lab for Students webpage.
UT Virtual Labs
Traditionally, on-campus labs have offered students the use of computer hardware and software they might not otherwise have access to. With UT’s Virtual Lab, students can now access virtual machines loaded with all of the software they need to be successful using nothing more than a broadband Internet connection and a web browser.

The virtual lab is open 24/7 and 365 days a year at VLAB: The University of Toledo’s Virtual Labs.

UNIVERSITY POLICIES
Policy Statement on Non-Discrimination on the basis of Disability (ADA) The University is an equal opportunity educational institution. Please read The University’s Policy Statement on Nondiscrimination on the Basis of Disability Americans with Disability Act Compliance.

Academic Accommodations
The University of Toledo is committed to providing equal access to education for all students. If you have a documented disability or you believe you have a disability and would like information regarding academic accommodations/adjustments in this course please contact the Student Disability Services Office.

COURSE POLICIES
Policy Statement on Academic Dishonesty
Academic dishonesty will not be tolerated. Please read The University’s Policy Statement on Academic Dishonesty.

The Department of Biological Sciences Policy Statement on Academic Dishonesty
Academic dishonesty will not be tolerated. Among the aims of education are the acquisition of knowledge and development of the skills necessary for success in any profession. Activities inconsistent with these aims will not be permitted. Students are responsible for knowing what constitutes academic dishonesty. If students are uncertain about what constitutes plagiarism or cheating they should seek the instructor’s advice. Examples of academic dishonesty include, but are not limited to:

- Plagiarizing or representing the words, ideas or information of another person as one’s own and not offering proper documentation;
- Giving or receiving, prior to an examination, any unauthorized information concerning the content of that examination;
- Referring to or displaying any unauthorized materials inside or outside of the examination room during the course of an examination;
- Communicating during an examination in any manner with any unauthorized person concerning the examination or any part of it;
- Giving or receiving substantive aid during the course of an examination;
- Commencing an examination before the stipulated time or continuing to work on an examination after the announced conclusion of the examination period;
- Taking, converting, concealing, defacing, damaging or destroying any property related to the preparation or completion of assignments, research or examination;
- Submitting the same written work to fulfill the requirements for more than one course.

While academic integrity is particularly the responsibility of the student, the faculty members also have a responsibility. Assignments and tests should be constructed and proctored so as to discourage academic dishonesty. Faculty members are expected to inform their students explicitly as to what materials and procedures are authorized for use in the preparation of assignments or in examinations (e.g., the use of calculator, computer,
text materials, etc.). Should cases of academic dishonesty be found among students, the instructor may choose to counsel the student, or the following sanctions may be imposed:

- The student may be assigned an F for the work in question.
- The student may be assigned an F for the course. In this case the instructor should inform the Dean and the student of this action. The Dean will make certain that the student receives the F grade and is not permitted to withdraw from the course.
- The student may be placed on probation or suspended for some definite period of time, dismissed or expelled by the Dean if either the seriousness of the offense or a record of repeated offenses warrants it. A notation that such a sanction has been imposed will be made part of the student’s permanent record. It is expected that the Dean will consult with the instructor and the student in making such a judgment, and that the Dean will notify the student of the sanction imposed and of the appeals procedure.

A student found to be academically dishonest by a faculty member may appeal according to procedures approved by the respective colleges. The procedures for making a final appeal to the Student Grievance Committee may be found in the Student Handbook.

Copyright Notice
The materials in the course website are only for the use of students enrolled in this course for purposes associated with this course, and may not be retained or further disseminated.

GRADING POLICIES
Student work will be assessed as follows. Specific guidelines, grading criteria, and a timeframe for grades and feedback will be provided as each assignment is announced:

<table>
<thead>
<tr>
<th>Assignments/Assessments</th>
<th>% of Final Grade</th>
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<tbody>
<tr>
<td>Online Participation in Topic Discussions</td>
<td>20%</td>
</tr>
<tr>
<td>Homework assignments</td>
<td>20%</td>
</tr>
<tr>
<td>3 Exams *</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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*Note optional final exam can replace lowest exam score

Students are expected to complete and submit all assignments and tests by the due date listed in the Course Schedule. Late assignments and make-up tests will not be permitted unless arrangements are discussed and approved well before the required due date. Ask questions as soon as possible by email or by phone if you do not understand an assignment.

I will post grades and feedback within a 24-48 hour period.

**Exams**
3 multiple choice regular exams will be given. These exams are 30 multiple choice questions each worth 2 points and 4 short essays worth 10 points each. They will not be comprehensive. Exam times are listed in the Course Schedule.

Exams must be proctored. Local students will take them in the UT Testing Center. Students parking on campus are advised to contact Parking Services for parking permit options and costs. Off-campus proctored testing is an option. Students outside the Toledo area will be required to locate an approved proctor in their local area and pay for any proctoring expenses. Learning Ventures is available to assist students with off-campus proctoring arrangements. Please visit the Student Requirements for Off Site Proctored Exams webpage to learn more about this process.
Exams taken at any time other than your regularly scheduled exam times are in essay only format. Ten (10) essay questions will cover the same material as the exam. Contact your instructor to set up a time and place for an essay exam.

Optional Final Exam
The final exam is optional. The same instructions for proctoring apply. If you are satisfied with your grade, you do not need to take the final. If you want to improve your grade, you may take the final. The final will consist of 100 multiple choice questions covering the entire semester. Each question is worth 1 point. The final will replace the lowest of the 3 regular semester exams. If the final is lower than one of your 3 in class exams, it will not count against you.

Homework
Homework is additional – a typical 3 credit course includes about 10 hours per week of homework, preparation, etc., in addition to the in class contact hours.

Athletes practice on a regular basis to train their muscles. They don’t go into an event without hours of practice spread over weeks. For you to do well in biology, you can’t cram the night before and expect to do well. You need to practice. Homework is practice for thinking like a biologist.

You will complete online homework assignments in BlackBoard for 20% of your grade.

There are 2 types of assignments.
- First, you will have “Pre-topic” assignments. Read the assigned text book sections first to become familiar with the material. Then answer 5 questions pertaining to that material. This gets you familiar with the material so that you are prepared for discussion.
- Second, you will have “During-topic” assignments that review and extend your knowledge. You will practice applying what you learn to these homework problems. This helps to prepare you for exams.

Discussion Boards
I will post a discussion board for each topic. Most discussion boards consist of two parts. First, you make some initial posting. Second, you reply to two of your peers’ postings. Specific directions are given for each discussion board. Make sure to complete all requirements to get full points.

The grading scale for this course is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>A-</td>
<td>87-89</td>
</tr>
<tr>
<td>B+</td>
<td>83-86</td>
</tr>
<tr>
<td>B</td>
<td>79-82</td>
</tr>
<tr>
<td>B-</td>
<td>75-78</td>
</tr>
<tr>
<td>C+</td>
<td>71-74</td>
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</table>

If you stop working in the course, you will receive an F unless you
- Drop the class by ___________
- Withdraw from the class at the registrar’s office by ______________

The grade of Incomplete (IN) is assigned only in extraordinary cases when unexpected conditions prevent the student from completing the requirements of the course within the term of enrollment. In order to receive an IN you must be passing the course and make arrangements with me to complete your work.
COMMUNICATION GUIDELINES

Email:
Students are expected to check their UT email account frequently for important course information. This class is being taught for you, so if you are having trouble understanding any aspect of it, please let me know. I am here to help, and will do my best to respond to email within 24 to 48 hours.

Discussion:
In this fully online course, participation is vital to your success, and your active engagement during weekly discussion is crucial to learning. On Monday morning of each week, a series of discussion questions will be posted in the discussion folder for that week. To earn full credit, you must BOTH post your response to the discussion question AND reply to two of your peers.

Real-Time Communication:
A link to a real-time communication or chat tool has been added to the Course Menu. We will not be using this tool as part of our course assignments; however, the tool is available for you to use if and when you need it. To that end, I would be happy to arrange a time to meet with you in a chat room if you feel that you have questions that would best be answered in real-time. Conversely, you could also use the tool to meet with fellow students online in order to enhance your understanding of course concepts.

Netiquette:
It is important to be courteous and civil when communicating with others. Students taking online courses are subject to the communication regulations outlined in the Student Handbook. To ensure your success when communicating online, take time to familiarize yourself with the “dos” and “don'ts” of Internet etiquette.

TECHNICAL SUPPORT
**If you encounter technical difficulties with Blackboard, please contact the UT Online Help Desk** at (419) 530-8835 or utdl@utoledo.edu. The Help Desk offers extended hours in the evenings and on weekends to assist students with technical problems. When calling after hours, leave a detailed message, including your Rocket Number and phone number, and an Online Learning staff member will respond on the next business day.

**Technical questions related to on-campus Internet access, virtual labs, hardware, software, personal website hosting, and UTAD account management can be directed to UT’s IT Help Desk** at (419) 530-2400 or ithelpdesk@utoledo.edu.

**Technical questions related to Mastering Biology homework can be directed to Mastering Biology’s Pearson 24/7 Technical Support** at (800) 677-6337 or http://247pearsoned.custhelp.com/app/ask/p/4130/c/4163.

LEARNER SUPPORT
The University of Toledo offers a wide range of academic and student support services that can help you succeed:

eTutoring Services
The Ohio eTutoring Collaborative, in partnership with The University of Toledo, now provides online tutoring support for all UT students. eTutoring Services are offered in a wide array of subjects, including Writing, Math, Calculus, Statistics, Accounting, Biology, Chemistry, and Anatomy and Physiology.

eLibrary Services Portal
The eLibrary is a customized gateway to UT Libraries for online students. It was designed to help you locate the best online library resources without leaving Blackboard.
Student Disability Services

Student Disability Services provides accommodations and support services to students with disabilities.

Counseling Center

The Counseling Center is the university's primary facility for personal counseling, psychotherapy, and psychological outreach and consultation services. The Counseling Center staff provide counseling (individual and group), mental health and wellness programming, and crisis intervention services to help students cope with the demands of college and to facilitate the development of life adjustment strategies.

Services for Online Students

Knowing what to do, when to do it, and who to contact can often be overwhelming for students on campus - even more so for distance learners. Visit the Resources for Current Students webpage to learn more about the wide range of services for online students.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES</th>
<th>TOPIC</th>
</tr>
</thead>
</table>
| 1    |       | Introduction to the Course  
|      |       | Topic 1: What is science?   |
| 2    |       | Topic 2: Nutrition           |
| 3    |       | Topic 2: Nutrition (cont.)   |
| 4    |       | Topic 3: Diabetes            |
| 5    |       | Topic 3: Diabetes (cont.)    
|      |       | Exam 1 available             |
| 6    |       | Topic 4: Cancer              |
| 7    |       | Topic 4: Cancer (cont.)      |
| 8    |       | Topic 5: Reproduction and Genetics |
| 9    |       | Topic 5: Reproductions and Genetics (cont.)  
|      |       | Exam 2 available             |
| 10   |       | Topic 6: Agriculture         |
| 11   |       | Topic 6: Agriculture (cont.) |
| 12   |       | Topic 7: Evolution in Action |
| 13   |       | Topic 7: Evolution in Action (cont.) |
| 14   |       | Topic 8: Weird Life          |
| 15   |       | Topic 8: Weird Life (cont.)  
|      |       | Exam 3 available             
|      |       | Optional final exam available |