I. Instructor Information

- **Name:** Dr. Aiwei Borengasser
- **Email:** aborengasser@pulaskitech.edu
- **Office Telephone:** (501) 812-2267
- **Office Location:** Main Campus, Science Building, Room 113
- **Office Hours:** By appointment.

II. Catalog Description

- 3 hours of lecture and 2 hours of lab
- This is a study of the general principle of biology and their relationship to society. Topics covered include genetics, the diversity of and unity of life, molecular and cellular biology. Laboratory experiences are integrated with lecture topics. A general education course for non-science majors
- **Prerequisites:** Completion of DEVE 0324 (Composition Fundamentals) with a grade of “C” or better, or a score of 19 or above on the English section of the ACT, or a score of 75 or above on the COMPASS Writing Placement test and completion of DEVE 0316 (College Reading) with a grade of “C” or better, or 82 or above on the COMPASS Reading Placement test.

III. Course Resources

The following 7 items are required for this course.

1. **Resource Material Packet:**
   - ISBN: 9781259406706
   - Product is pre-packaged and includes:
     1. Textbook
     2. **Access code** for Connect Plus includes:
        - eBook,
        - LearnSmart/Smartbook Adaptive Learning Program &
2. **McGraw-Hill Connect:**
   - You are required to register with McGraw-Hill Connect within the first week of the semester.
   - See instructions below to register access code.
   - If you do not purchase your required resource materials by the end of the first week you are required to register for the free limited time courtesy access. See instructions below for registering for the courtesy access.
   - Please be aware that if you register with the courtesy access you are still required to purchase and register an access code by 11:59 pm of Census day as posted on the PTC calendar **regardless** of the expiration date of a courtesy access account or you will be dropped from the course.
   - You are required to always access your McGraw-Hill Connect assignments through Bb.

**To register with McGraw-Hill Connect:**
   - You are required to properly register with McGraw-Hill Connect to assess your Activities and Labs: Activities include, but are not limited to: Exams, Quizzes, Labs and LS Chapter Reading Assessments.
   - In Bb click on the “Register with McGraw-Hill” menu tab located in the left hand column
   - Click on “Register with McGraw-Hill”.
   - Follow online instructions:
     - You should see a “Welcome” a sign-in on the left and your class, instructor, and text book listed on the right
     - Click Register Now
     - Enter your PTC email address (you must use your PTC email address or your grades will not post to Bb, and you will receive zero points)
     - Next enter the registration assess code which came with your text book and click on submit. There should be a card attached with a picture of your text book. Open the card to reveal the access code.
   - **IMPORTANT:** Do not go directly to the McGraw-Hill website to access your activities and labs. You must access each activity and lab through Bb or the grades will not post to Bb. You may go directly to the McGraw-Hill website to access a library full of helpful resources and study aids.
   - You are responsible to monitor that your grades post to Bb. Please email if a grade does not post within one week of the due date. If you wait longer than a week the grade may not be recovered and you will receive zero points.

3. **Computer:**
   You are required to have regular access to a dependable computer, dependable internet access, and ability to use the Internet. (There are several open computer labs on campus.).
4. **LMS (Learning Management System):**
   You are required to have the ability to access and use Blackboard and Jenzabar eLearning LMS.

5. **PTC email:**
   You are required to know your PTC email account and have the ability to access and use PTC email account.

6. **Handouts as necessary.**
   These will be supplied to you through Blackboard

7. **Internet resources as necessary.**

**OPTIONAL:**
LearnSmart Prep for Biology: ISBN: 0073532304
http://learnsmartadvantage.com/course-books/learnsmart-prep-biology/

**Purchase of required resource materials:**

- The campus bookstore is usually open extended hours and Saturdays for two weeks at the beginning of the semester to accommodate the students.
- Financial Aid: If you are approved for financial aid then have that money made available in the bookstore. It is your responsibility to make sure that the financial aid has been processed so that it will be available in the bookstore before you arrive to purchase your resource material packet. Most of the time financial aid is available the week before classes begin until the second week of classes. Make sure you file early and complete all paperwork accurately so that your financial aid will not be delayed.
- If you are waiting on “payday” you can register for the McGraw-Hill Connect free limited time courtesy access. This will give you access to all course work including the ebook so you can stay current with your assignments.
- If you choose not to purchase the required resource packet from the campus bookstore you are still responsible to purchase all required resource materials within the first two weeks of the semester or you will be dropped from the course.
- Regardless of the reason, there are no exceptions or extensions granted for purchasing the required resource materials and registering with McGraw-Hill Connect within the first two weeks of the semester. This course begins on day one of the semester and not on the day your materials arrive in the mail.
IV. Course Objective and Course Content

Expected Student Learning Outcomes:
The student will explain, describe, discuss, recognize, and/or apply knowledge and understanding of the following:
- Scientific method
- Classification
- Cell and membrane structure and functions
- Biochemistry
- Enzymes
- Respiration and photosynthesis
- Mitosis and meiosis
- Metabolism
- Genetics
- DNA
- Evolution
- Ecology

V. Attendance Policy

YOU ARE ADVISED THAT Agencies granting financial assistance may be notified of the violation of the attendance policy by students receiving financial aid.

In an online class, eligibility for financial aid is based on student participation. Simply logging in to the course does not by itself constitute participation. Examples of participation include, but are not limited to, posting to the discussion board, submitting an assignment, taking an assessment, or emailing the instructor about the course.

Students who do not participate will not be able to collect financial aid for an online class.

Although you have a certain amount of freedom in deciding when you will complete the course work there is a timetable and deadline for completion. If you experience significant personal difficulties that prevent you from meeting these deadlines, you will need to contact your instructor prior to the deadline for the assigned materials.

Attendance Requirements:

- Attendance is VERY important. The week’s online course work assignments are structured in such a way that logging on and immediately logging off will not be possible! There will be weekly course work including, but not limited to, assignments, labs, and quizzes then about every three weeks there will be a unit examination.
• Attendance and Participation are both required for this course and are traced using course login records, assignment, and/or test submissions.

**Academic and/or Administrative Drops:**

• You will be dropped if you do not register with a purchased access code for McGraw-Hill Connect Plus with LearnSmart Labs by 11:59 pm on Census Day as posted on the PTC calendar.

• You will be dropped if you do not complete the Course Agreement Test by 11:59 pm on Census Day as posted on the PTC calendar.

• You will be dropped if you do not complete the Syllabus Agreement by 11:59 pm on Census Day as posted on the PTC calendar.

• You may be dropped if you miss two consecutive course work assignments administered through McGraw-Hill Connect including quizzes and/or exams.

• **You will be dropped if you receive zero points on a total of four regular labs regardless of the reason.** (This does not include any labs assigned as bonus.)

**Extenuating Circumstances:**

• Pulaski Technical College Extenuating Circumstances Policy will be followed only if the student experiences a catastrophic event. It is the student’s responsibility to provide proper documentation from the hospital, funeral home (immediate family only), or law enforcement authorities (i.e. mandatory court such as Jury Duty or motor vehicle accident report. This does not include pre-scheduled court). The student is responsible for providing adequate documentation within one week of the occurrence of extenuating circumstance(s) along with completing any necessary form(s) to be considered for an extenuating circumstance.

• Please note: Home life, routine child care, car trouble, computer trouble, minor illness (not involving hospital services), and work are **NOT** considered extenuating circumstances.

• In the case of a lengthy catastrophic event it will be the student’s responsibility to apply for an incomplete grade in the course. If the student meets the criteria to receive an incomplete grade then the policy and protocol for such will then be initiated.
VI. Online Course Policies (Class Policies)

The Pulaski Technical College Student Handbook rules and regulations will be enforced in this course at all times.

**Blackboard:**
- If you need help with Blackboard call (866)588-3194 or contact onlinecourses@pulaskitech.edu and they will assist you.

**Correspondence:**
- **If you have a question/problem...** If you should have a problem and/or question about anything, and I do mean anything just email me through the class website.
- **Please only email me through Blackboard unless it is not working.** That way I can keep all of your correspondence together in the class.

**Course Work:**

**Read Chapter & View PowerPoint:**
It is highly recommended that you read the chapter prior to beginning the assignments and labs. *Preparing for an assignment and/or lab will usually result in less time needed to complete the assignments. It is like the difference between reading the chapter first then answering the questions at the end OR trying to answer the end of the chapter questions without first reading the chapter. Which one takes longer to complete?*
- Read current chapter for the week
- **PowerPoint with Lecture:** Follow along with the PowerPoint as you read the chapter or view the PowerPoint as a preview and/or review of the chapter.

**Assignments:**

- **Bb Discussion**
  There will be three discussions (Week 1, Week 9, and Week 15). **Discussions cannot be made up.** They are due by **Sunday.**

- **LS (LearnSmart) Chapter Reading Assessment Assignments:**
  There will be one reading assessment for each chapter. There is no deadline for each assignment. You will get the full credit as long as you do the assignment during the semester. LearnSmart/Smartbook adaptive learning program. The program will learn with you. This assignment is usually set for 30 questions with an average completion time of 30 minutes;
however if you do not read and study the chapter prior to this assignment it will usually take you much longer to complete. The program learns with you. If you miss a question an additional question will be added to the original 30 questions. Rather than being asked 30 questions you may be asked to answer 60 questions. The program may continue to ask you questions until you demonstrate that you comprehend the topic.

**Exams & Quizzes:**
- **Exams** are all online and will usually be multiple choice questions.
  - See Course Schedule for dates. Exams will usually be available for 1 week only.
  - Make-up exams will not be given.
- **Quizzes** will also be given online. They will all be multiple choice questions, and you can take them as many times as you wish in order to make a 100%.

**Labs:**
- All labs are to be accessed online through Bb then completed through McGraw-Hill Connect. Labs usually consist of pre-lab questions followed by virtual simulated lab experiments. Each lab will take approximately 2 hours to compete. If you do not score well you can repeat the lab again up until the due date and time.

**Course Work Expectations:**
A successful student will read each chapter and take notes on the particular topics emphasized. College students should be aware that it is anticipated that you will need to spend 2 hours outside of a class studying and preparing for each 1 semester hour credit for any class. For a 4 credit hours class you should expect to spend 8 hours outside of class per week.

For an online course, such as this one, each week it is expected that you will spend on average of 3 hours completing online course work, 2 hours to complete each of the required labs, plus up to an additional 8 hours reading, studying, and preparing for quizzes and exams.

For some students it will take less time, for others it may take more. It is all up to YOU!!!

Set yourself up for success:
- **Budget your time for each week:**
  - Schedule a minimum of 2 hours to complete each lab,
  - Schedule 3 hours to complete Assignments, and
  - Schedule 8 hours for reading and studying the material
    - Make this time manageable by scheduling two hours a day 4 days a week
    - You might want to break this down and spend one hour in the mornings and one hour in the evenings studying.
- Spend a couple of hours each day on completing the activities for this course.
- **Do not attempt to complete assignments, labs, quizzes, and/or exams at 10:00 pm on the same evening in which they are due. This a sure plan for failure.**
McGraw-Hill Connect:

- You are required to register with McGraw-Hill Connect to assess your Course Work.
- **IMPORTANT:**
  - Do not go directly to the McGraw-Hill website to access your course work assignments. You will need to access them through Bb or your grades may not synch and you may receive a grade of zero for those assignments.
- **Monitor Grades:**
  - It is your responsibility to monitor that your grades are posting to Connect. If a Connect grade does not post to Blackboard within one week after the due date it is your responsibility to email your instructor with the exact name of the assignment which did not post and then follow and complete the instructions you receive. Instructions may include contacting McGraw-Hill Connect Technical Support.
- **Emergency Access:**
  - http://connect.mheducation.com
  - Use this direct website access ONLY if Bb is unavailable. If you ever use this emergency access are required to send me an email so that I can manually synch your grades to Bb. Failure to inform me within 24 hours may result in loss of grades for the assignments completed and a grade of zero will be recorded.

**McGraw-Hill Connect Technical Issues**

- **To Avoid Common Technical Issues:**
  - Register access code using your PTC email address NOT a personal email address.
  - ALWAYS use Firefox or Google Chrome for internet access to Bb and McGraw-Hill Assignments.
  - Access Connect assignments ONLY through Bb or grades will not sync and may be lost.

- **Types of Technical Issues and how to report them:**
  - **Posting of Grades:**
    Email instructor immediately for instructions
  - **Unable to see assignment:**
    Email your instructor immediately.
  - **Any Technical Issue occurring during an active assignment:**
    Contact McGraw-Hill Tech support immediately!
    If you experience a technical problem with a Connect assignment (including any assignment, quizzes and/or exams) or with a LS Lab experiment you are required to report the problem immediately to McGraw-Hill tech support. Especially the virtual simulation labs. If the issue is reported while you are logged into the assignment or lab then tech support will be able to see what you are seeing. If the tech support line is closed for business then record the name of the assignment or lab along with the question number or section so that you can describe where the problem was occurring when you do contact tech support. Take a screen shot of the problem and save it to a document. Often tech support will request that you send a screen shot. **Failure to report the problem or delay in reporting may result in losing all points for the assignment, quiz, exam, and/or lab.**

    Customer Experience Group (CXG) Hours of Operation
    Sunday: 12pm -11pm  Mon-Thurs: 8am - 11pm  Friday: 8am - 6pm  Saturday: 10am - 4pm
    All times Central Time Zone (Little Rock time)
    By Phone: Call toll free at 800-331-5094
    By Email: Click on website listed below then click "Contact Us"
By Chat: Click on website listed below then "Click Here" under Representatives are available.
http://mpss.mhhe.com/products.php

- **Grade Adjustments:**
  Anytime you contact McGraw-Hill Technical Support you are required to email your instructor to become eligible for any grade adjustments. The email must include the case number assigned, a brief description of the reported issue, and any screen shots. Necessary grade adjustments cannot be made unless you provide your instructor with this required information within one week of occurrence of the issue. Please include only one issue per email. Multiple issues within the same email will not be considered for grade adjustments.

### VII. Grading

Letter grades will be based on the following scale:

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 to 100%</td>
<td>A</td>
</tr>
<tr>
<td>80 to 89%</td>
<td>B</td>
</tr>
<tr>
<td>70 to 79%</td>
<td>C</td>
</tr>
<tr>
<td>60 to 69%</td>
<td>D</td>
</tr>
<tr>
<td>0 to 59%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Point Distribution:**
- Course Agreement Form ........................................................................................................ 20
- Discussion (3 @ 50 points each) .......................................................................................... 150
- LS Chapter Assessment (16 @ 50 points each) ................................................................. 800
- Labs (14 @ 50 points each) .................................................................................................. 700
- Chapter Quizzes (16 @ 30 points each) .............................................................................. 480
- Unit Exams (5 @ 100 points each) .......................................................................................... 500
- Comprehensive Final ........................................................................................................... 100
- Microscopy Technique Assessment .................................................................................... 200
- Microscopy Quiz .................................................................................................................. 50

Total Possible Points .................................................. 3000

**LAST DAY TO DROP or WITHDRAW:** April 22, 2016
VIII. ACADEMIC INTEGRITY

It is expected that all students who attend Pulaski Technical College conduct themselves in a manner appropriate for the college experience. Academic integrity is a vital component of collegiate behavior. The student handbook states: “The gaining of knowledge and the practice of honesty go hand-in-hand.”

The handbook also states, “The responsibility and authority of initiating discipline arising from violations of the rules against dishonesty during the process of the course are vested in the instructor of that course.”

The complete Academic Integrity Policy can be found in the PTC Student Handbook.

IX. ACCOMMODATION POLICY

Services for Students with Disabilities:

Pulaski Technical College is committed to fulfilling all federal requirements as stated in the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Accommodations are available to students who have documented disabilities. Students who request accommodations must register with the Coordinator of Disability Services in Counseling Services (501-812-2220 or www.pulaskitech.edu) prior to the semester of planned enrollment, and must provide recent documentation of medical, educational, and/or psychological records.

Students who need accommodations should inform the instructor at the beginning of the course. Accommodations will only be provided if the instructor receives a letter of approved accommodations from the Coordinator of Disability Services. Failure to communicate with your instructor about your disability may result in a delay of services.

X. COURSE EVALUATIONS

Students may be asked to evaluate their instructor and course near the end of the semester. These student evaluations are very important to the improvement in the quality of instruction and course materials. All results are anonymous and shared with the faculty only after the semester is over and grades have been posted.

XI. INFORMATION LITERACY

Pulaski Technical College is committed to the Information Literacy Competency Standards for Higher Education as established by the Association of College and Research Libraries and endorsed by the National Forum on Information Literacy. Therefore, all courses will incorporate an information literacy component so that, by graduation, all students will be able to recognize the need for information, then locate, evaluate, synthesize, and communicate information in an ethical manner. Information literacy encompasses critical thinking, research, media, technology, health, business, and visual literacy skills to produce lifelong learners who can make informed decisions in the workplace and in their personal lives. Pursuant to this end from time to time you
will be sent to the internet or library for short exercises in acquiring knowledge outside the scope of your textbook.

XII. NEW STUDENT PHILOSOPHY STATEMENT

Pulaski Technical College is committed to the academic, personal, and professional development of its students. The quality of the new student experience is critical to the achievement of the college’s mission and lays the foundation upon which future educational successes will be built. This commitment obligates the PTC community to cooperatively and intentionally structure programs, activities, and services to promote the success of new students.

XIII. PTC Board Email Policy

Pulaski Technical College provides each currently enrolled student an electronic mailbox (email). This electronic mailbox is used as an official means for communication between Pulaski Technical College and the enrolled student. Each currently enrolled student will monitor and read messages sent to the mailbox address in a timely fashion. Use of this electronic mailbox is governed by the Pulaski Technical College Code of Computing Practices.

XIV. Disclaimer regarding changes to the syllabus

The instructor reserves the right to amend the course syllabus. Any amendments will be announced in class, and provided in writing.
### XV. Course Schedule/Course Content

*Disclaimer: This schedule is a guide for the semester. The instructor reserves the right to amend the schedule as necessary.*

### COURSE OUTLINE (This outline is tentative and may change as the semester moves forward)

| Orientation | 1. WELCOME  
2. Complete Course Agreement  
3. Purchase Required Course Materials  
4. Register with McGraw-Hill Connect  
5. Let’s get started | All orientation items are due by the end of the second week of the semester. |

<table>
<thead>
<tr>
<th>Wk</th>
<th>Days</th>
<th>Read Chapter &amp; View PowerPoint</th>
<th>ASSIGNMENTS</th>
<th>LAB(s)</th>
<th>QUIZ</th>
<th>Unit EXAMS</th>
</tr>
</thead>
</table>
| 1  | Jan 19-24  | Chapter 1: A View of Life     | • Syllabus Student Contact  
• Course Agreement  
• LS Chapter 1 Reading Assessment | Scientific Method         | Quiz 1  | =========  |
| 2  | Jan 25-31  | Chapter 2: The Chemical Basis of Life | • LS Chapter 2 Reading Assessment | pH and Cells            | Quiz 2  | =========  |
| 3  | Feb 1-7    | Chapter 3: The Organic Molecules of Life | • LS Chapter 3 Reading Assessment | Chemical Composition of Cells | Quiz 3  | =========  |
| 4  | Feb 8-14   | Chapter 4: Inside the Cell    | • LS Chapter 4 Reading Assessment | Cell Anatomy            | Quiz 4  | Unit Exam 1 (Ch 1-4)  |
| 5  | Feb 15-21  | Chapter 5: The Dynamic Cell   | • LS Chapter Reading 5 Assessment | 1. Osmosis 2. Diffusion | Quiz 5  | Microscopy Practice |
| 6  | Feb 22-28  | Chapter 6: Energy for Life    | • LS Chapter 6 Reading Assessment | Photosynthesis           | Quiz 6  | Microscopy Practice |
| 7  | Feb 29 – Mar 6 | Chapter 7: Energy for Cells | • LS Chapter 7 Reading Assessment | Cellular Respiration   | Quiz 7  | Unit Exam 2 (Ch 5-7)  |
| 8  | Mar 7-13   | Chapter 8: Cellular Reproduction | • LS Chapter 8 Reading Assessment | Mitosis  | Quiz 8  | Practical Microscopy |

Instructor: Dr. Aiwei Borengasser
<table>
<thead>
<tr>
<th>Page</th>
<th>Date</th>
<th>Chapter Title</th>
<th>Reading Assessment</th>
<th>Topic</th>
<th>Quiz</th>
<th>Exam Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Mar 14-20</td>
<td>Chapter 9: Sexual Reproduction</td>
<td>LS Chapter 9 Reading Assessment</td>
<td>Meiosis</td>
<td>Quiz 9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mar 28-Apr 3</td>
<td>Chapter 10: Patterns of Inheritance</td>
<td>LS Chapter 10 Reading Assessment</td>
<td>Mendelian Genetics</td>
<td>Quiz 10</td>
<td>Unit Exam 3 (Ch 8-10)</td>
</tr>
<tr>
<td>11</td>
<td>Apr 4-10</td>
<td>Chapter 11: DNA Biology &amp; Technology</td>
<td>LS Chapter 11 Reading Assessment</td>
<td>DNA Biology &amp; Technology</td>
<td>Quiz 11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Apr 11-17</td>
<td>Chapter 12: Gene Regulation &amp; Cancer Chapter 13: Genetic Counseling</td>
<td>LS Chapters 12 and 13 Reading Assessment</td>
<td>Human Genetics</td>
<td>Quiz 12</td>
<td>Unit Exam 4 (Ch 11-13)</td>
</tr>
<tr>
<td>13</td>
<td>Apr 18-24</td>
<td>Chapter 14: Darwin &amp; Evolution</td>
<td>LS Chapter 14 Reading Assessment</td>
<td>Evidence of Evolution</td>
<td>Quiz 14</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Apr 25-May 1</td>
<td>Chapter 15: Evolution on a Small Scale</td>
<td>LS Chapter 15 Reading Assessment</td>
<td>Natural Selection</td>
<td>Quiz 15</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>May 2-8</td>
<td>Chapter 16: Evolution on a Large Scale</td>
<td>LS Chapter 16 Reading Assessment</td>
<td></td>
<td>Quiz 16</td>
<td>Unit Exam 5 (Ch 14-16)</td>
</tr>
<tr>
<td>16</td>
<td>May 7-12</td>
<td>Finals Week</td>
<td>COMPREHENSIVE FINAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>