



PRAIRIE VIEW
A&M UNIVERSITY

SYLLABUS

BIOL 1113 College Biology I
Summer 2019
June 3 – July 8, 2019

Instructor: Dr. Tia Villeral
Section # and CRN: Z01, 32673
Office Location: E.E. O'Banion Science Building, Suite 430P
Office Phone: (936) 261-3197
Email Address: tdvilleral@pvamu.edu or iMail Feature in eCourses for immediate response
Office Hours: Mondays and Wednesdays 11:30-2:30 PM (VIRTUAL)
Mode of Instruction: ONLINE
Course Location: eCourses and McGraw-Hill Connect

Catalog Description: Credit 3 semester hours. Introductory course for non-biology majors. Emphasis on basic biological principles and their application to human life. Contemporary biology that covers the chemical basis of life, structure and function of the cell, molecular biology and genetics.

Prerequisites: None
Co-requisites: BIOL 1111. ** (BIOL 1306)

Course Description

Biology 1113 is an **on-line course** offered via a web-based program, PVAMU ecourse (see PVAMU homepage for link) with a mandatory required Smartbook (see ecourse for details).

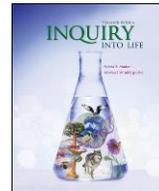
Please note that this course requires effective time management by students in order to remain on schedule.

Students should plan to allocate, *at a minimum*, the time required for the course when offered in an on-campus/ face to face setting. **As a rule of thumb, it is recommended that a student spend 2 hours of study for each 1 hour in class. Therefore, for a 3.0 credit hour lecture course, a minimum of 6 hours of study per week for an online course offered for 15 weeks. Considerably more time will be required if the course is offered for 5 weeks.** The course is comprised of 11 Chapters, and multiple assignments organized to correspond to a standard semester. **The course is NOT self-paced; approximately three chapters must be completed each week during the five week summer semester.** Each Chapter includes the following learning activities: 1) assigned mandatory readings from the electronic SmartBook. Each Smartbook chapter has an estimated completion time however, this time is often exceeded. 2) Depending on the chapter, completion of LearnSmart quizzes, ecourse quizzes, or discussions are required and 3) Daily Participation assignments that state the daily/weekly activities and due dates.

ELECTRONIC TEXTBOOK (SmartBook):

Students are required to purchase Connect Plus, a digital teaching and learning environment with an electronic textbook (SmartBook). Connect Plus is a web-based assignment and assessment platform that gives students the means to better connect with their coursework, with their instructors, and with the important concepts that they will need to know for. The SmartBook is the only book **required** for this course.

The SmartBook is an adaptive reading experience designed to transform the way students read. It creates a personalized reading experience that focuses on content based on a student's understanding and evaluates students' knowledge in real time to adapt the course textbook.



Inquiry into Life, 16th Edition

Author(s): Mader, Sylvia; Windelspecht, Michael

Publisher: McGraw-Hill Higher Education

Section web address:

<http://connect.mheducation.com/class/t-villeral-summer-2019-1113>

*see eCourses for link to site and access code

Connect with LearnSmart Online Access for Inquiry into Life 16th Edition

ISBN10: 1260482545 | ISBN13: 9781260482546 (\$85.00 for 6months)

DO NOT purchase LAB (with Connect, \$120.00)

ISBN10: 1259688577 / ISBN13: 9781259688577

courtesy access (free access) available for 14 days

How SmartBook Works

Each chapter in the SmartBook contains four stages, Preview, Read, Practice and Recharge:

1)**Preview** - You start with a preview of each chapter that familiarizes you with key learning objectives. Previewing establishes a framework of the material in your brain, which helps you retain knowledge over time.

2)**Read** - While reading, you are guided to focus on core topics where you should spend the most time studying.

3)**Practice** - As you read the material, SmartBook also presents you with questions to help identify what content you know and don't know.

4)**Recharge** - To ensure concept mastery and retention, you must Recharge in order to review the important material you're likely to forget

Supplementary Learning Materials

The SmartBook is the only book required for this course. However, students can purchase additional supplemental text content materials if they so desire. Students are strongly encouraged to read the textbook and if supplementary resources are needed, the library has an enormous amount of material.

Access to Learning Resources:

PVAMU Library: phone: (936) 261-1500; web: <http://www.pvamu.edu/library/>

University Bookstore: phone: (936) 261-1990; web: <https://www.bkstr.com/Home/10001-10734-1?demoKey=d>

COURSE GOALS

The goal of this course is to

1. Demonstrate an understanding of the fundamental concepts of biological principles.
2. Understand and appreciation for the scientific method and its applications to problem solving.
3. Develop an awareness of the unity and diversity of life, and to develop an understanding of the mechanisms for the identification of living organisms.
4. Stimulate students to become intellectually self-reliant, and to enhance their aesthetic appreciation of life itself.
5. Apply analytical and critical thinking skills to problems and issues in science and society and to the critical analysis and synthesis of biological literature.
6. Demonstrate effective written communication skills in a biological context.

COURSE OUTCOMES

Upon completing BIOL 1113, the student will demonstrate the following competencies:

- * Define and explain basic biological concepts (characteristics of living things, levels of organization,

biological Kingdoms, the scientific method, atomic particles, cellular components, organic compounds, photosynthesis and cellular respiration, cellular division, genetic crosses and genetic abnormalities)

- * Apply critical thinking skills to scientific inquiry
- * Analyze and interpret empirical and quantitative biological data
- * Demonstrate the ability to effectively communicate the fundamentals of biology in a written report
- * Demonstrate the ability to engage in productive teamwork

COURSE EVALUATION METHODS:

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams – There will be approximately two multiple choice tests designed to measure scientific knowledge of presented course material and application of critical thinking, empirical and quantitative skills.

Online Class Assignments

Class assignments are designed to supplement and reinforce course material by using critical thinking and written communication skills. Class assignments will also incorporate the analysis and interpretation of empirical and quantitative data. For group activities (Discussion Forums), students will work in small groups to demonstrate productive teamwork by exhibiting the ability to work effectively with others to support a shared goal and consider different points of view.

Web-based Quizzes and LearnSmart modules – regular web based activities designed to measure ability to apply critical thinking, empirical and quantitative skills to presented course material. There will be > twenty web-based activities given during the semester. These will consist of a combination of objectives and discussion items. The web –based activities schedule (availability and due dates) will be available in the eCourse calendar.

Smartbook – Weekly assigned readings.

LearnSmart assignments launch directly into the assignment chapter and are integrated with SmartBook. LearnSmart is an adaptive learning tool that maximizes productivity and identifies the most important learning objectives for each student to master at a given point in time.

Written Assignments

Initial Essay - Initial Narrative Essay: Goals and Expectations for the On-line Biology Course. In the essay, your student profile should give relevance information that may influence your progress in this course (prior course work, have you taken a biology course before, extracurricular activities, hobbies, jobs, personal difficulties, etc.) Describe the learning techniques that you have used successfully, and what you know about the on-line biology course. Indicate which of the topics is of greatest interest to you and why. Discuss why you chose to take this course, how you will define successful completion of the class, and how to achieve it. Address any concerns you may have about the class.

Written Report – Students will demonstrate written communication and critical thinking skills by writing a “Science in the News” Report. Students must find one recent news article about a subject related to the material in this course from a reputable newspaper, magazine, or web news source. The article must cover a topic that is related to the subject matter of BIOL 1113. Students will search for articles using key vocabulary from the class lectures and assignments. The report will be graded on the appropriateness of the topic, content, organization, tone, sentence structure, word choice, writing mechanics, conclusion, reference quality, citation format and length of the report. The grading rubric, criteria for selection of article, and other important details about the written “Science in the News” report will be available on the BIOL 1113 ecourse site.

**Your grade will be based on a total of 100 points. Course grades are determined from total point accumulation at the end of the semester, as follows:

Grading Matrix

Class Assignments

Daily Web-based Activities 45 pts. (45%)

- LearnSmart Modules
- Chapter Quizzes
- eCourse Quizzes

Communication

- 4 Asynchronous communications/Teamwork (Group) Activities 10 pts (10%)

Exams & Written Assignments

40 pts. (40%)

2 Exams

1 Initial Essay

1 Written Report

Participation

5 pts (5%)

Daily/Weekly Participation Grade (Every Monday & Wednesday- eCourse participation due)

Total 100 pts.

(100%)

GRADING SCALE 90-100=A; 80-89=B; 70-79=C; 60-69=D; Below 60=F

Accessing the Gradebook -Students may access their grades by clicking on the “My Grades” tab located in the left-hand navigation bar.

TENTATIVE COURSE OUTLINE

BIOL 1113 will cover thirteen chapters: **Chapter 1** The Study of Life, **Chapter 2** The Molecules of Cells, **Chapter 3** Cell Structure and Function, **Chapter 4** Membrane Structure and Function, **Chapter 5** Cell Division, **Chapter 6** Metabolism: Energy and Enzymes, **Chapter 7** Cellular Respiration, **Chapter 8** Photosynthesis, **Chapter 21** Reproductive System, **Chapter 23** Patterns of Gene Inheritance, and **Chapter 24** Chromosomal Inheritance and Genetic Disorders, **Chapter 27** Evolution of Life, **Chapter 32** Animals: Chordates and Vertebrates

See eCourses for scheduled assignments.

COMMUNICATION

Students can communicate with the instructor via the iMail (email function in eCourse).

All communications must be in standard English. Your instructor will not read or respond to abbreviated communications in “text message” format.

All electronic mail communication related to this course will utilize the iMail tab. To communicate by e-mail within the course with other participants or all participants, click the Mail tab link on the left and click Create Message to send a message. Students are able to send messages to All Users or Select Users in the course, including the instructor. Be sure to check only the recipients that you want to receive the E-mail.

Your instructor will hold a “virtual” office hour on Mondays and Wednesdays. During these times I will respond to email inquiries as well as to postings on the discussion blogs. Students will receive timely responses to any email sent during normal business hours (i.e., 8 am to 5:00 pm) during the work week (i.e., Monday through Friday). Any e-mail sent at other times will be addressed during the next regular work day. Should I be out of the office, an unavailable to students, for any reason I will post an announcement so that students may plan accordingly.

“Discussion” forums are required for the course. These discussions are provided expressly to facilitate addressing student’s questions and to stimulate discussion involving the content covered in each lesson. Students may communicate with the instructor and with one another via the discussion forum feature in ecourse, which is an online discussion forum in which students and faculty can communicate asynchronously (i.e., at any time) via message postings. Since postings are asynchronous, others will post responses after your postings.

COURSE PROCEDURE

This section of Biology 1113 is a three semester credit hour lecture for 5 weeks on-line course. The course activities are designed to reinforce the textbook materials and to enhance the understanding of scientific concepts.

The student should:

1. Read assigned electronic textbook chapters during the assigned time interval.
2. Complete LearnSmart modules and eCourse quizzes during the assigned time interval.
3. View eCourse Homepage on regular basis (at least three times a week (suggested check: Monday, Wednesday, and Friday).
4. Complete eCourse participation on a weekly basis.
5. Respond to relevant questions during discussion forum (asynchronous and synchronous communications) during the assigned time interval.

University and Course Rules and Procedures

1. COURSE WORK

Students **MUST** take the scheduled quiz or examination within the 24-hour period on the dates indicated. In the on-line delivery format, **THERE IS NO OPPORTUNITY FOR MAKE-UP QUIZZES OR EXAMINATIONS** unless official excuse is provided. All assignments **MUST** be submitted by the established deadline. Assignments submitted within 24 hours of the established deadline will be subject to a significant penalty in points. Submissions made more than 24 hours after the established deadline will not be accepted. There is no “extra credit” work available, nor are exceptions or extensions to established schedules and policies except in the case of medical emergency documented with the Dean of Student Affairs. Examinations There are five major exams will be given during the semester. Exam questions will be multiple choice. Do not schedule any activity during the final exam period in this class. There will be no excused absences or makeup for the final exam. The final exam is not cumulative. **MAKE-UP EXAMS:** Students are strongly advised to take all exams at the scheduled time. Plan and schedule your activities so that you can be present to take all exams at the scheduled time. Students with non-valid or non-official excuses for missing an exam will earn a grade of zero (0) for the missed exam. Students may request a make-up exam for one that was missed. However, the instructor will schedule the time and place of the make-up exam which will not interrupt the teaching of the class or delay the complete coverage of the course topics.

2. **STUDENT CLASS ATTENDANCE POLICY:** The University Attendance Policy requires students to be present for each scheduled class or schedule online assignments. Students are responsible for materials covered during their absences. Online class assignments will start at the prescribed time and end at the prescribed time. Failure to complete online assignments are accumulated beginning with the first day of class. The University catalog provides more detailed information.

3. **ACADEMIC MISCONDUCT:** (Students caught cheating will receive a grade of F for the course. Students are prohibited from participation in acts of academic dishonesty, including tampering with records or falsifying admissions or other information. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit. The undergraduate catalog provides more detailed information. It is the responsibility of students and faculty members to maintain academic integrity at the University by refusing to participate in or tolerate academic dishonesty. Reports must be the work of the individual student. Evidence of copying your work from others, including the world wide net, is cheating. Students should read the section on Offenses and Appropriate Disciplinary Actions in the current PVAMU website catalog.

Forms of academic dishonesty:

Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.

Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.

Fabrication: use of invented information or falsified research.

Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

4. **NONACADEMIC MISCONDUCT (See Student Handbook):** The University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.
5. **SEXUAL MISCONDUCT (See Student Handbook):** Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.
6. **DISABILITIES:** The office of Disability Services is located in Evans Hall, room 315 or call (936) 261-3585. This office is responsible for achieving and maintaining program accessibility for all students who self-identify as having an officially documented disability (Rehabilitation Act, Section 504 and Americans with Disability Act) If you have a disability, please inform me so that I can assist you to get "reasonable accommodation" related to the disability. ADA Statement: Students with disabilities who believe they may need adjustment in this class are encouraged to contact the Office of Disabilities Services at (936) 261-3585 as soon as possible. Once you receive a letter of adjustment from the office, please make an appointment with instructor to discuss adjustments for this class.
7. **STUDENT ACADEMIC APPEALS PROCESS:** Authority and responsibility for assigning grades to students rest with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint. All challenges or recalculations of final course grades must be documented by the student with appropriate paperwork, and must be brought to the attention of the instructor within the first week following completion of the course. Quiz and examination grades must be contested within the first week following administration of the quiz or examination. After these deadlines, changes will not be considered. **Course Time Limits:** This is a semester-based course and you must complete all course requirements within the semester that you are enrolled. It is important to schedule your course study to fit into your academic plan. Be aware many instructors are not on campus during the holidays or term breaks, which can delay the return of corrected assignments. Therefore, if you have important deadlines to meet such as graduation, be sure to complete and submit all of your assignments and take the final examination as scheduled. It is your responsibility to ensure the credits for this course will apply toward graduation or certification deadlines.

Technical Considerations for Online and Web-Assisted Courses

Minimum Hardware and Software Requirements:

- Pentium with Windows 7 or PowerMac with OS 10.7 or later
- Ethernet or wireless connection to the Internet
- Internet provider with SLIP or PPP Broadband service
- 2GB RAM
- Hard drive with 40MB available space
- 17" monitor, 1024x768, color or 16 bit

- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Netscape Communicator ver. 4.61 or Microsoft Internet Explorer ver. 9.0 /plug-ins or Mozilla, Foxfire, Google Chrome
- Plug-ins
 - Flash 11+
 - Java SE6, SE7
 - Quicktime 7.7+
 - Java: Version 1.5 or higher
 - Media Player: Flash 9 or higher
 - Adobe Reader Version 7 or above
- Participants should have a basic proficiency of the following computer skills:
 - Sending and receiving email
 - A working knowledge of the Internet
 - Proficiency in Microsoft office Suite
 - Proficiency in the Acrobat PDF Reader
 - Basic knowledge of Windows or Mac O.SX.

Netiquette (online etiquette): students are expected to participate in all discussions and virtual classroom chats when directed to do so. Students are to be respectful and courteous to others in the discussions. Foul or abusive language will not be tolerated. When referring to information from books, websites or articles, please use APA standards to reference sources. Students in traditional classes may not need to participate in online discussions.

Technical Support: Students should call the Prairie View A&M University Helpdesk at 936-261-2525 for technical issues with accessing your online course. The helpdesk is available 24 hours a day/7 days a week. For other technical questions regarding your online course, call the Office of Distance Learning at 936-261-3290 or 936-261-3282

Communication Expectations and Standards:

All emails or discussion postings will receive a response from the instructor within 48 hours. You can send email anytime that is convenient to you, but instructor checks email messages throughout the work-week (Monday through Friday). Instructor will respond to email messages during the work-week by the close of business (5:00 pm) on the day following **receipt** of them. Emails received on Friday will be responded to by the close of business on the following Monday.

Submission of Assignments (may not be required for traditional courses):

Assignments, Papers, Exercises, and Projects will distributed and submitted through your online course. Directions for accessing your online course will be provided. Additional assistance can be obtained from the Office of Distance Learning.

Discussion Requirement for online courses:

There will be no required face to face meetings on campus (online courses only). However, we will participate in conversations about the readings, lectures, materials, and other aspects of the course in a true seminar fashion. We will accomplish this by use of the discussion board.

Students are required to log-on to the course website often to participate in discussion. It is strongly advised that you check the discussion area daily to keep abreast of discussions. When a topic is posted, everyone is required to participate. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have

another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it should be copied and pasted to the discussion board.

Student Learning Outcomes:

Program Learning Outcome # Alignment: Knowledge of #1) the chemical basis of life, #2) the central concepts of Genetics; #3) Cell Biology; #4) Organismal Biology; and #5) Scientific Communication

Core Curriculum Outcome Alignment: Critical Thinking, Communication, Empirical and Quantitative Skills, and Teamwork

	Upon successful completion of the BIOL 1113 course, students will be able to demonstrate the following competencies	Program Learning Outcome # Alignment	Core Curriculum Outcome Alignment
1	Define and explain basic biological concepts (characteristics of living things, levels of organization, biological kingdoms, the scientific method, atomic particles, cellular components, organic compounds, photosynthesis and cellular respiration, cellular division, genetic crosses and genetic abnormalities and animal structure/function)	#1 - #4	Critical Thinking
2	Apply critical thinking skills to biological science and scientific inquiry	#5	Critical Thinking
3	Analyze and interpret empirical and quantitative biological data	#5	Empirical and Quantitative Skills
4	Demonstrate the ability to effectively communicate the fundamentals of biology	#5	Communication
5	Demonstrate the ability to engage in productive teamwork	#5	Communication, Teamwork

Summer 5 Week Calendar

Week 1	<i>June 3-9 (Monday-Sunday)</i>
Topic Description	Unit 1. Cell Biology
Readings:	Ch. 1 Study of Life Ch. 2 Molecules of Cells Ch. 3 Cell Structures and Function
Assignment (s):	eCourses and Connect assignment(s)
Week 2	<i>June 10-16 (Monday-Sunday)</i>
Topic Description	Unit 1. Cell Biology (Continued)
Readings:	Ch. 4 Membrane Structure and Function Ch. 5 Cell Division Ch. 6 Metabolism: Energy and Enzymes
Assignment (s):	eCourses and Connect assignment(s)
Week 3	<i>June 17-23 (Monday-Sunday)</i>
Topic Description	Unit 2. Energy assimilations
Readings:	Ch. 7 Cellular Respiration Ch. 8 Photosynthesis
Assignment (s):	eCourses and Connect assignment(s)
EXAM ONE	AVAILABLE VIA eCOURSES
Week 4	<i>June 24-30</i>
Topic Description	Unit 3: Understanding Inheritance
Readings:	Ch. 21 Reproductive System Ch. 23 Pattern of Gene Inheritance Ch. 24 Chromosomal Inheritance
Assignment (s):	eCourses and Connect assignment(s)
Week 5	<i>July 1-5</i>
Topic Description	Unit 4. Evolution
Readings:	Ch. 27 Evolution of Life Ch. 32 Animals: Chordates and Vertebrates
Assignment (s):	eCourses and Connect assignment(s)
FINAL EXAM	AVAILABLE VIA eCOURSES
Important Dates	June 07 Fri First day to withdraw with 'W' June 19 Wed Exam One Available June 28 Fri Last day to withdraw with 'W' July 05 Fri Final Exams as Scheduled by the University July 08 Mon Final Grades Due to Registrar