

Syllabus

ODL BIOL 2160, version 1.2

Effective: January, 2024

BIOL 2160—Human Physiology (3 credits)

Course Description: *BIOL 1001 or BIOL 1201 recommended. May be taken for free elective credit by a student majoring in Biological Sciences, Biochemistry, or Microbiology. Students will not receive credit for both this course and BIOL 4160.* Elements of human physiology; controls and functions of the various organ systems.

Textbooks and Other Materials

Note: This course requires a code to access online materials and may require that special arrangements are made to provide extended material access periods in the event that a course extension is needed. Please carefully read and follow the textbook ordering information provided below and in the "Getting Started" module of the Moodle course.

Textbook and Mastering A&P Access

This course utilizes a textbook, which is available in hard copy form and an online version, and access to a Pearson Mastering A&P course website. This website contains the required assignments for the course. *You are required to have access to the textbook* (either hard copy or online through Mastering) and *an access code to the Mastering website*. In order to access your eBook, assignments, and study tools in Mastering A&P, you must use the Course ID for your textbook and then create an account on the Pearson site. Once you create an account, you will enter the course ID to complete your enrollment. Please follow the steps listed in the Power Point found in the Getting Started module in Moodle to enroll in Mastering A&P.

ODL is *not responsible* for student purchases that result in *the receipt of the wrong materials*. *It is the responsibility of the student to order the correct*

textbook materials. Courses are written to specific textbook editions; edition substitutions *are not allowed*.

If you wish to purchase a hard copy textbook, please use the following ISBN. You will likely run across a few options for buying the textbook and/or access for Mastering A&P . If you purchase a textbook bundle, you still need to register through the Mastering A&P website.

Cindy Stanfield. *Principles of Human Physiology*. 6th ed. Pearson, 2017.

ISBN-10: 0-134-16980-8

ISBN-13: 978-0-134-16980-4

If you wish to purchase an electronic version of the textbook (e-text) instead of a physical, hard copy textbook, please use the following ISBN. This e-text also INCLUDES access to the online Mastering A&P website.

ISBN-10: 0-134-42900-1

ISBN-13: 978-0-134-42900-7

Ordering Information

Please review the following tips for ordering your course materials:

1. Do not purchase your textbooks until your enrollment is approved. During the processing period, a new section may be opened that could require a different textbook or edition.
2. Courses that require special access codes *require* that students use the direct links to the publisher microsites. (See the information in the syllabus and Getting Started Module for additional ordering instructions.)
3. *Always order by the ISBN*. Publishers and vendors often offer the same textbook title under different ISBNs. You must have the correct ISBN to access your online website.
4. If you are having problems locating a textbook, contact us at Answers@outreach.lsu.edu for assistance.

Other Materials and Resources

For your exams, it is recommended that you have a small dry erase whiteboard on hand to use as scratch paper. You may easily purchase these at any office, school supply, or department store. No other materials will be allowed as scratch paper during the exams.

Software: MS Word, Microsoft PowerPoint or PowerPoint Viewer, Adobe Acrobat Reader.

It is recommended that you use Mozilla Firefox or Google Chrome as your web browser. Internet Explorer is not compatible with your Moodle course site.

Adobe Acrobat Reader is required to view PDF document files.

Hardware: *Web cam with a microphone (built-in or external), headphones or working speakers, and high speed internet*

Proctored exams are completed online and require the hardware listed above. Students are encouraged to review the technical requirements provided on the ProctorU website and to perform a test on their equipment prior to enrolling in this course to make sure they have the necessary resources available. There is a separate charge for each proctored exam.

Technical Requirements: <http://www.proctoru.com/tech.php>

Equipment Test: <http://www.proctoru.com/testitout/>

Nature and Purpose of the Course

Course Outcomes

Upon completion of this course, students are expected to be able to:

1. Demonstrate knowledge of a broad survey in the discipline, including the underlying principles that govern the natural world.
2. Use inductive and deductive reasoning to understand scientific phenomena.
3. Employ scientific and mathematical methods and technology in the resolution of laboratory and real-world problems.

This course is designed to provide students with an understanding of the function and regulation of the human body and physiological integration of the organ systems to maintain homeostasis. This course is also meant to aid in the development of the critical thinking and reading skills necessary for successful careers in the health industry. Course content will include topics in cell structure, metabolism, and membrane transport in addition to neural and hormonal homeostatic control mechanisms. Organization and integration of the musculoskeletal, cardiovascular, respiratory, urinary, digestive, reproductive, and immune organ systems will also be examined in detail throughout this course.

An online course requires you, the student, to be in control of your learning. In a face-to-face course, instructors can play a much bigger role in actively directing your learning, since they see you two or three times a week. In an online course, it takes a lot more work in designing an appropriate learning environment, so that you can learn at your own pace. Since you are in control, you need to be disciplined enough to complete assignments on a regular basis and stay up to date with the course.

Working with the Course Materials

Remember, this course covers an entire semester of work or the equivalent of a classroom course lasting 15 weeks. That means that each module in this course equals nearly a week of course work and will require the same time and effort on your part. *Do not expect to complete each module in a single study session. Understand, too, that if you choose to submit assignments at a very high pace, your instructor may not be able to grade your work at the same rate.*

Each module contains information, activities, and assignments organized under a consistent series of headings. Get familiar with how the module is organized. Each module in this course is organized into the following sections: the Module Learning Objectives, the Module Reading Assignment, the Module lecture videos, the graded Moodle Quiz, a graded Mastering A&P Homework assignment, and the extra module practice materials. You should work through these parts of the module in order. Specific recommendations are provided in a link to the course module instructions, which you should review before beginning the first module.

Working Through the Module

Each module contains a single chapter from the textbook that has been divided up into more manageable sections. For example, CH 01 consists of smaller PowerPoint lectures CH 1.1, 1.2, and 1.3. I would suggest that you use the following approach in completing the module:

1. Check your email for recent announcements or updates. This is a 100% online course, so you should be checking your email on a regular basis, since this is primary way that I will communicate with you.
2. Check Moodle for recent announcements or updates.
3. Review the Module Instructions file posted in Moodle for the assigned module. This is your guide for what needs to be completed within the module.
4. Download/print the Module Checklist for the assigned module. This is a summary of the learning objectives for the entire chapter and the list of all activities for the entire module.
5. Download/print the Chapter Outline for the assigned module. This is a summary of the entire chapter in outline form.
6. View the PowerPoint lecture videos for the module. Each chapter has been broken down into individual video files for chapter sections (i.e., CH 1.1 PowerPoint video lecture). Some modules will have more chapter sections than others, but each module will focus only on a single chapter.
7. Complete the Reading Assignments for each chapter section within the module. Some modules will have more chapters sections than others (e.g., CH 1.1, pages 1-9).
8. Complete the assigned quiz in Moodle for the module. You may take the quiz a maximum of *two* times and your highest score will be used as your grade.
9. Complete the Mastering A&P homework assignment for the module. Once you have submitted your work in Mastering A&P , you must come back to Moodle and verify that you have completed it by using the link provided in each module. Failure to click on the "Module 01 (CH 1) Assignment Verification" link will delay your score for that assignment being posted to your Moodle grade book.
10. Complete any extra assignments for the module. These are posted to Moodle in the Module Extras folder located near the bottom of each

module. Items in this folder may include activities such as a crossword puzzle using the key chapter terminology. These are not assigned for credit, but will help you master the material each week.

11. If you have questions or are unsure about something in the course, please post your questions to the Question & Answer Forum for that module. Alternatively, if you know the answer to a question that someone has posted here, I encourage you to answer it and share your ideas with the rest of the class. This forum is the last item located at the bottom of each module.

Best Practices

1. Carefully review the module objectives to help you focus on the information that will be covered on the exams.
2. Put yourself on a definite schedule. Set aside a certain block of hours per day or week for this course and work in a place where distractions are minimal.
3. Try to submit one assignment each week or at least every two weeks. Delays in submitting assignments usually result in lagging interest and the inability to complete the course.
4. Regardless of how you complete your graded assignments, keep in mind that module completion should not be your sole preparation for your exams. As with any college course, you should study for your exams.

Reading Assignments

The textbook and the reading material from the chapter are designed to complement the lecture videos. Some students find that reading the assigned material before viewing the lecture's PowerPoint files and videos is helpful. Other students prefer to use the textbook mainly as a reference tool to help in areas where they do not completely understand the material in the outlines and lectures. It is important for you to find out for yourself which method works best for you.

Each assigned chapter will correspond to a module in the course. Just as the chapters in your textbook are divided into smaller sections, each of your lecture videos is also broken down into multiple, smaller sections. The number of sections in a chapter will vary; this is also true for the number of lecture videos in each module.

You will read an average of 20-35 pages per module. Specific reading assignments will be given in each module.

Topic Outline

This course covers the following specific topics:

| Module | Topic |
|-----------------------|---|
| 01 | Introduction to Physiology |
| 02 | The Cell Structure and Function |
| 03 | Cell Metabolism |
| 04 | Cell Membrane Transport |
| 05 | Chemical Messengers |
| 06 | Nerve Cells and Electrical Signaling |
| EXAMINATION I | |
| 07 | The Cardiovascular System Cardiac Function |
| 08 | The Cardiovascular System Blood Vessels, Blood Flow, and Blood Pressure |
| 09 | The Cardiovascular System Blood |
| 10 | The Respiratory System Pulmonary Ventilation |
| 11 | The Respiratory System Gas Exchange and Regulation of Breathing |
| 12 | Muscle Physiology |
| EXAMINATION II | |
| 13 | The Urinary System Renal Function |
| 14 | The Urinary System Fluid and Electrolyte Balance |
| 15 | The Gastrointestinal System |
| 16 | The Reproductive System |
| 17 | The Immune System |
| 18 | Diabetes Mellitus |
| FINAL EXAM | |

Module Assignments

Every module will have an associated assignment in Mastering A&P. Mastering A&P is an online tutorial and homework program that accompanies your textbook. It has a number of features, one of which is the presentation of questions for assignments. These questions will be of various types (e.g., multiple choice, true/false, matching). The grading of the questions is based on correctness. You may get hints for a question, and if you miss a question you may try again. You should read and understand the grading policy for the assignments in Mastering A&P.

Module Quiz

For each module, you will be required to take online quizzes through the course Moodle site. These quizzes are another way to assess your progress and preparation as you progress through the course. Each quiz allows two 30-minute attempts and will be made up of multiple-choice and true/false questions. The questions will be graded based on correctness of response and a grade will be returned to you after you submit the quiz. Once a quiz has been graded you will be able to reopen the quiz to check which question you got correct and view the correct answer for any questions you may have missed. There will also be feedback given for incorrect answers so that you will understand why your answer choice may not have been the best one.

Carefully study the provided materials and the material in the textbook before you begin to prepare the module assignments.

Practice Materials

To help you further master the topics covered in the course, there are additional non-graded items and resources available to you in each module. You can find these in a folder near the bottom of the module following the Module Assignment. These activities are there for you to use as you like. They may consist of crossword puzzles, links to current articles on chapter topics, extra practice questions, etc.

You should submit each module assignment as soon as it is completed. Some courses have restrictions that require that a grade be received before you can submit additional assignments. Specific information on assignment submission is included in the Module Instructions. Please be sure to follow these instructions.

You must have a *grade posted in the Moodle grade book for the **Module 18 Assignment** in order to unlock access to the Final Exam.* Please allow at least 7 days for the final assignment grade to be posted in the gradebook.

Once you *submit* an assignment, you cannot revise it, so be sure to check your work. Your instructor will normally post a grade for your assignment within *seven calendar days*. Understand that occasional delays will occur, such as during holidays and semester breaks or if you submit several module assignments within the same week. You must have been enrolled in the course for *at least three weeks*, regardless of when the modules and other exams are completed.

Do not rely too heavily on your textbook or other resource material when preparing your assignments. If you do, you may not realize until exam time that the perfect response you prepared for an assignment was only possible because you referred to resource material without really learning or understanding the material and concepts. Therefore, *you should attempt each assignment without referring to the resource material*, and if you find it necessary to look up an answer, be sure you have actually learned the concept and material rather than merely reflecting it in the answer.

Academic Integrity

Students in Online Distance Learning (ODL) courses must comply with the *LSU Code of Student Conduct*. Suspected violations of the academic integrity policy may be referred to LSU Student Advocacy & Accountability (SAA), a unit of the Dean of Students. If found responsible of a violation, you will then be subject to whatever penalty SAA determines and will forfeit all course tuition and fees.

Plagiarism

Students are responsible for completing and submitting their own course work and preparing their own modules. All work submitted in the course modules must be the student's own work unless outside work is appropriate to the assignment; all outside material must be properly acknowledged. It is also unacceptable to copy directly from your textbook or to use published answer keys or the teacher's edition of a textbook.

Collaboration

Unauthorized collaboration constitutes plagiarism. Collaborative efforts that extend beyond the limits approved by the instructor are violations of the

academic integrity policy. Students who study together are expected to prepare and write their own individual work for submission and grading.

For more information and links to the *LSU Code of Student Conduct* and the SAA website, go to the [ODL Academic Integrity policy](#) on our website.

Examinations and Grading Policy

Your performance in this course will be assessed in three ways: homework assignments for each chapter section within a module via the Mastering A&P website, online quizzes for each module via the course Moodle site, and three exams that will also be taken in Moodle. These exams are equally weighted toward the course grade. All three exams will consist of 100 questions. Each exam will have various question types such as multiple choice, true/false, matching, ranking and select from a group. The final exam is not cumulative.

You will have a maximum of *three* hours to complete the exam.

YOU MUST EARN A PASSING AVERAGE ON THE EXAMINATIONS IN ORDER TO PASS THE COURSE.

If you earn a passing average on the examinations, your grade will be computed as follows.

The course grade is based on the weighted average of the Mastering A&P assignments, the average of quiz grades, and the exam scores. Each component is weighted by the following predetermined percentages.

Course grade =

| Component | Weight (%) |
|---------------------------------|------------|
| Average of Homework Assignments | 10% |
| Average of Quizzes | 15% |
| Examination I (Modules 01-06) | 25% |
| Examination II (Modules 07-12) | 25% |
| Final Exam (Modules 13-18) | 25% |

The following
grading scale
applies:

97%–100% = A+
93%–96% = A
90%–92% = A-
87%–89% = B+
83%–86% = B

| | |
|---------|------|
| 80%–82% | = B- |
| 77%–79% | = C+ |
| 73%–76% | = C |
| 70%–72% | = C- |
| 67%–69% | = D+ |
| 63%–66% | = D |
| 60%–62% | = D- |
| 0%–59% | = F |

IMPORTANT: The final exam cannot be taken until you meet the following requirements. Under no circumstances may the final exam be taken earlier.

1. You must have been enrolled in the course for *at least three weeks*, regardless of when the modules and other exams are completed.
2. You must have a *grade posted in the Moodle grade book for the Module 18 Assignment in order to unlock access to the Final Exam*. Please allow at least 7 days for the final assignment grade to be posted in the gradebook.

To read the full exam policy and other policy statements, visit <http://www.outreach.lsu.edu/Extended-Campus/Online-Distance-Learning/Guidelines-Policies/Policies>. Go to Continuing Education's homepage. Click on *Extended Campus*, select *Online Distance Learning*, and then click the link for *Guidelines and Policies*.

Taking Your Examinations

You are *required* to create a Louisiana State University ODL ProctorU account and to take your examinations through ProctorU, a remote proctoring service that allows you to take exams anywhere with internet access (some restrictions apply). Information on creating your ProctorU account can be found in the *Getting Started* module. You cannot use an account created through another university, so if you already have an account, you will still need to create an account associated with LSU Online Distance Learning (ODL).

The ProctorU website provides links you can use to find out how ProctorU works and to check your computer to see that it meets the technical requirements. In addition, to test using ProctorU, you need *access to a web cam with a microphone (built-in or external), headphones or working speakers*, and

high speed internet to use this service. A complete list of technical requirements is available from the ProctorU website.

You should schedule your exams about a week before you are ready to take them in order to avoid any additional charges.

Transcript Information

After you have completed this course, your grade will be filed with the Office of the University Registrar. If a transcript is needed, it is your responsibility to make a request to the registrar. If you would like to order a transcript, visit the Office of the University Registrar Transcript Requests page to view your options (<http://sites01.lsu.edu/wp/registraroffice/student-services/transcript-request/>).

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