

## I. COURSE DESCRIPTION

**BIOLOGY – BIOL 1408 – GENERAL BIOLOGY I.** Four hours credit. This course provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. THIS COURSE IS NOT INTENDED FOR SCIENCE MAJORS. The laboratory portion of the course will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Three lecture hours and two lab hours each week. Lab fee.

### A. Intended Audience

Business, Human Services, Criminal Justice, Child and Family Development, and certain liberal arts and fine arts majors.

### B. Instructor

Instructor: Dr. Matthew Dempsey B.A., M.S., Ed.D.

Office: N/A – Available online by appointment via Blackboard Collaborate

Office Hours: By appointment – there will be scheduled office hour sessions throughout the semester

Phone: 936-633-5255 (this is the division office number for Science – I do not have an AC phone)

e-mail: [mdempsey@angelina.edu](mailto:mdempsey@angelina.edu)

## II. STUDENT LEARNING OUTCOMES

### A. Core Objectives Required for this Course

1. **Critical Thinking:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication:** to include effective development, interpretation and expression of ideas through written, oral and visual communication
3. **Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. **Teamwork:** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

### B. Course Learning Outcomes for all Sections

Upon successful completion of this course, students will:

1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
5. Interpret the results of karyotypes, pedigrees, and biotechnology experiments.
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
7. Analyze evidence for evolution and natural selection.
8. Be able to apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
9. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
10. Communicate effectively the results of investigations.

## III. ASSESSMENT MEASURES (as determined by the instructor)

### A. Assessments for the Core Objectives:

1. **Critical thinking** – Students will complete a project that assesses inquiry, synthesis, analysis, and results. Evidence of critical analysis will be evaluated using a standardized AC rubric.
2. **Communication** – Students will complete a project that assesses organization, quality of informational sources, and written communication skills. Communication skills and abilities will be evaluated using a standardized AC rubric.
3. **Empirical and Quantitative Skills** – Students will complete a project that assesses representation, calculation, interpretation, and application and analysis. Empirical and quantitative skills will be evaluated using a standardized AC rubric.

4. **Teamwork** – Students will complete a project that assesses effective communication with team members, team climate, contributions to a team, and responses to team members. Team members will evaluate the performance of one another. Teamwork will be evaluated using a standardized AC rubric.
- B. Assessments for Course Learning Outcomes**
1. Students will distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures on embedded exam questions.
  2. Students will identify stages of the cell cycle, mitosis (plant and animal), and meiosis in lab activities and embedded exam questions.
  3. Students will interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration in classroom activities and on embedded exam questions.
  4. Students will apply genetic principles to predict the outcome of genetic crosses and statistically analyze results through the use of pedigrees and Punnett Squares in lab activities.
  5. Students will interpret the results of karyotypes, pedigrees, and biotechnology experiments on embedded exam questions and in lab activities.
  6. Students will identify parts of a DNA molecule, and describe replication, transcription, and translation on embedded exam questions.
  7. Students will analyze evidence for evolution and natural selection in lab and classroom activities.
  8. Students will apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data in lab activities.
  9. Students will use critical thinking and scientific problem-solving to make informed decisions in the laboratory as evidenced by safe laboratory practices and on embedded exam questions.
  10. Students will communicate effectively the results of investigations on assigned biological topics.

## IV INSTRUCTIONAL PROCEDURES

This course will be taught using Blackboard. You will be given PowerPoint lectures, reading assignments, learning guides, online homework, chapter quizzes, discussion assignments/journals, projects, and virtual laboratory experiments. You will also have two non-proctored major exams (midterm and final) and two non-proctored lab exams. We will also have pop-up sessions using Blackboard Collaborate for your enjoyment and learning.

## V. COURSE REQUIREMENTS AND POLICIES

### A. Required Textbooks and Recommended Readings, Materials and Equipment

1. Textbook: (Free! PDF via download or \$55 hardcopy) – go green and go digital!
  - a. **Concepts of Biology**, OpenStax College. The textbook can be downloaded for free at <https://openstax.org/details/concepts-biology> ([CLICK HERE](#)) or you may purchase a hard copy on Amazon.com or via the AC bookstore.
2. Virtual Laboratory: (\$59.95 online)
  - a. **Late Nite Labs**. An access code can be purchased in the AC bookstore or online at <https://labs.latenitelabs.com/signin> ([CLICK HERE](#))
    - i. Use the following course ID to enroll: **33377198 Dempsey 2019SP - Angelina**
3. Additional computer requirements and/or skills
  - a. High-speed internet connection
  - b. Blackboard access
  - c. AC email account access (I will send you emails and announcements to your AC email only)
  - d. Word Processor (e.g. MS Word)
  - e. Spreadsheet (e.g. MS Excel)
  - f. Able to save and use a PDF.

**B. Course Policies – This course conforms to the policies of Angelina College as stated in the Angelina College Handbook.**

- 1. Educational Accommodations** – If you have a disability (as cited in Section 504 of the Rehabilitation Act of 1973 or Title II of the Americans with Disabilities Act of 1990) that may affect your participation in this class, you may fill out the Educational Accommodations application within your AC Portal, under the “Student Services” tab. A Student Success team member will contact you once the application is received. At a post-secondary institution, you must self-identify as a person with a disability in order to receive services; for questions regarding the application process you can visit the Office of Student Success and Inclusion in the Student Center (Room 200) or email [access@angelina.edu](mailto:access@angelina.edu). To report any complaints related to accommodations, you should contact Annie Allen, Director of Student Success & Inclusion, in Room 200 of the Student Center. You may also contact Ms. Allen by calling (936) 633-4509 or by emailing [aallen@angelina.edu](mailto:aallen@angelina.edu). To report discrimination of any type, contact Steve Hudman, Dean of Student Affairs, at (936) 633-5292 or [shudman@angelina.edu](mailto:shudman@angelina.edu).
- 2. Attendance** – Attendance is required as per Angelina College Policy. For Internet courses, attendance will be assessed by participation and completion of assignments in a timely manner. Records will be turned in to the academic dean at the end of the semester. Do not assume that non-attendance in class will always result in an instructor drop. **You must officially drop a class or risk receiving an F.** This is official Angelina College Policy. **The last day to drop the class with a “W” is PLEASE SEE THE AC ACADEMIC CALENDAR FOR THIS DATE.** You must email the registrar’s office ([registrar@angelina.edu](mailto:registrar@angelina.edu)) in order to drop the course.
- 3. Additional Policies Established by the Instructor – these are from me, so pay attention!**

Students are expected to participate in the semester through courteous, relevant comments and questions. Behavior that interferes with the learning environment will not be tolerated.

ATTENDANCE

Periodically throughout the semester, your participation in the course will be determined through discussion boards, homework, lab experiments, quizzes, projects, and exams. If you fail to participate in required assignments for the course, you will be considered in “non-attendance” and risk being dropped from the course.

MAKE-UP EXAMS

There will be **NO** make-up exams and **NO** due date extensions. Please plan accordingly. Should unusual circumstances arise, regardless of their nature, they **MUST** be **WELL** documented, subject for interpretation, and they must be deemed to be extreme circumstances. Flat tires are only a problem if you are waiting to the last minute. Illnesses must be so severe that they physically prevent you from performing the task of the class. Lastly, work is work. If you have to go away on a work trip, take an exam early.

STUDENT CONDUCT

A positive environment for learning will be maintained by students being courteous to each other and to the instructor. Cheating on assignments is not tolerated as per Angelina College policy and may result in expulsion from the course.

EMAIL POLICY

E-mail will be checked on Monday mornings and you can expect about a 24hr turn around on all emails during the work week. I check my email for the last time Friday at noon, and you can expect all weekend emails to be answered the following Monday. Knowing that I will not check my email over the weekend, please consolidate your ideas. I would cringe to see an inbox with multiple emails from a single user. Hardly something to laugh about, but I once had 30 emails from a single student over a weekend. Certain e-mail subjects will be ignored. Per FERPA guidelines I cannot discuss your grades over email. I will also not respond to any emails that ask for an “extra day” or “extra time.” The district has a very tight SPAM filter, and if you do not feel like your email is being addressed in a timely manner, call me. Please keep all communications respectful and classy.

Students will not send unsolicited email espousing a cause, religion, or activity to other class participants and will not add other class participants to any listserves or other entity which distributes unwanted email or material.

OTHER COLLEGE POLICY

I teach at multiple colleges – please let me know if you see any information that appears to come from another college. I try to weed out the other info – but it sometimes pops up. Let me know so I can streamline your course to be specifically for Angelina.

#### END OF CLASS PROCEDURES:

When this class ends, it ends. When the final exam deadline passes, I will take down the entire course. I do this so I can configure the grades properly. This means that if you wish to preserve anything from the course, you should make sure that you have downloaded your gradebook or any materials before that day. I will still be available to you via email, but your access to the course shell and all the materials will be gone forever.

#### MY ACADEMIC DISHONESTY POLICY:

I will not tolerate cheating. If you are caught plagiarizing your journals, cheating in the testing center, or other manners or cheating, my penalty is failure in the entire course. Not just an F on the assignment, you will fail the course.

#### QUIZ POLICY:

I get a lot of questions about my quizzes and I would like to address it here. When you take a quiz, it does not tell you what you got right and what you got wrong. This is intentional. Like a good science experiment, we run the process and then we get results. Interpreting the results is the cornerstone of the scientific process. We often don't know what went right and what went wrong. The science, is sorting this out. You will get the hang of it. With the quizzes I encourage you to collaborate with others, talk through the answers, and learn. When you reaffirm you got something right, you have taken the guesswork out of future responses. When you research something, you thought you got right, but in-fact got wrong, you truly learn. Lastly, when you research a question you got completely wrong, you are uncovering areas you may need to study further.

#### CERTIFICATION OF ATTENDANCE POLICY:

You have three assignments to complete in the first week. You must (a) to post in the discussion board, (2) complete the first journal, and (3) take the intro quiz. The introduction quiz is imperative because this is what I use to certify your attendance. Which means if you skip this quiz, it may impact your financial aid status in the class! If you click on the START HERE link its in there!

#### COMPUTER GLITCH POLICY:

You may encounter a computer glitch while you are taking a quiz. This happens. I empathize, it happens to me too. Here is what you do. Make sure you have documented the glitch (screenshots, cell phone pics, or an official eyewitness. Secondly, save your documentation. Please do not ask for quiz resets as I will not be resetting quizzes over the semester. Usually I can see that the glitch has occurred because it looks like the quiz was abandoned – I will delete two glitch quizzes per student over the semester. If you think somehow quiz glitches have altered your final grade, you may present your documentation for consideration of a grade recalculation. I can tell you that in the history of teaching this class, that has never occurred, but I am willing to accept the discussion. Systemic and habitual computer failure will be considered a student's responsibility.

## VI. TECHNICAL SUPPORT

### A. Access to Blackboard

1. Students may log into Blackboard through:
  - a. AC webpage under My Student Tools, click the AC Blackboard link
  - b. The following link (<https://angelina.blackboard.com>) [CLICK HERE](#)
2. Troubleshooting Blackboard
  - a. Initially contact your instructor ([mdempsey@angelina.edu](mailto:mdempsey@angelina.edu))
  - b. Contact IT help desk ([ithelpdesk@angelina.edu](mailto:ithelpdesk@angelina.edu))

### B. Access to Late Nite Labs Tech Support:

1. Troubleshooting Late Nite Labs
  - a. Contact Technical Support
    - i. <https://community.macmillan.com/community/digital-product-support> ([CLICK HERE](#))

## VII. COURSE OUTLINE

Description of the Course Activities including due dates, schedules, and deadlines

### MODULE 1

- **Chapters 1-5 in the lecture:** Best way to approach this is to open the module, print out the learning objectives, read the textbook chapter (make note of the objectives and either write or highlight). Review the power point lecture. Then you should be ready to take a quiz.
- **Quizzes 1-5 in lecture:** These are located at the end of the module in Blackboard. You can take them as many times as you like, but careful your grade will be averaged, so be prepared when you go into them. If you mess up, you just have to

retake them to bring up your averages. PS, the Introduction Quiz is factored into this too.

- **Labs 1-7:** These are located at <https://labs.latenitelabs.com> see the syllabus for the course ID#
- **Lab Practical 1:** this will be located in the "Module 1 (CH 1-5)" Un-proctored/timed
- **Journals 1 & 2:** These will be located in the "Journals (1-5)"
- **Projects 1 & 2:** These will be located in "Projects (1-4)"
- **Mid-term Exam:** this will also be located in the Module 1 "(CH 1-5)" Un-proctored/timed

\*Everything in Module 1 is due by Thursday 4/11/19 at 5PM – NO EXCEPTIONS OR EXTENSIONS.

\*A more detailed calendar can be found on Blackboard

\*Blackboard announcements overrule the calendar

\*The instructor reserves the right to modify this calendar at any time to create the best possible learning environment.

## MODULE 2

- **Chapters 6-11 in the lecture:** Best way to approach this is to open the module, print out the learning objectives, read the textbook chapter (make note of the objectives and either write or highlight). Review the power point lecture. Then you should be ready to take a quiz.
- **Quizzes 6-11 in lecture:** These are located at the end of the module in Blackboard. You can take them as many times as you like, but careful your grade will be averaged, so be prepared when you go into them. If you mess up, you just have to retake them to bring up your averages. PS, the Introduction Quiz is factored into this too.
- **Labs 8-12:** These are located at <https://labs.latenitelabs.com> see the syllabus for the course ID#
- **Lab Practical 2:** this will be located in the "Module 2 (CH 6-11)" Un-proctored/timed
- **Journals 3, 4, & 5:** These will be located in the "Journals (1-5)"
- **Projects 3 & 4:** These will be located in "Projects (1-4)"
- **Final Exam:** this will also be located in the Module 2 "(CH 6-11)" Un-proctored/timed

\*Everything in Module 2 is due by Thursday 5/9/19 at 5PM – NO EXCEPTIONS OR EXTENSIONS.

\*A more detailed calendar can be found on Blackboard

\*Blackboard announcements overrule the calendar

\*The instructor reserves the right to modify this calendar at any time to create the best possible learning environment.

## VIII. EVALUATION AND GRADING

Lecture grades are based on exams, discussion posts, quizzes, and projects. Lab grades are based on two lab exams and virtual lab experiments. The course is based on points – at the publication of this syllabus – the total points is 1000.

Lecture 70% + Lab 30% using the following scale:

90-100=A

80-89=B

70-79=C

60-69=D

59 and below=F

\*Rounding to the nearest whole number using 0.5.

12 Quizzes (20pts each – based on average number of attempts) = 240pts

12 Labs (20pts each – score based on pct. of questions right) = 240pts

4 Projects (20pts each) = 80pts

5 Journals (15pts ea + Journal 4 is 40pts – detailed rubric in assignment) = 100pts

2 Lab Practical (70pts each – timed / not proctored) = 140pts

2 Exams (100 pts each – timed / not proctored) 200 pts

**MY GRADES** – when you open up Blackboard you typically have access to a link called MyGrades. I want you to be warned, my grades is a great source for getting your individual point totals; however, you need to be aware that MyGrades is often misleading way to calculate your grade. You want to use this syllabus and the helper files in Blackboard to best determine your grades. So the best way to calculate your grade is to start with the syllabus and then look for any modifications made in the announcements section of Blackboard.

You're invited to join my group "1408 Angelina" on GroupMe.

[https://app.groupme.com/join\\_group/47414074/UNkUcM](https://app.groupme.com/join_group/47414074/UNkUcM)

**SYLLABUS MODIFICATION:** The instructor may modify the provisions of the syllabus to meet individual class needs by informing the class in advance as to the changes being made.