

BIOLOGY 101 – GENERAL INFORMATION – Fall 2008

Website: <http://www.idmb.tamu.edu/biology101/>

TEXTBOOK- NEW THIS YEAR! Levitin & McMahon, *Plants & Society* 5th edn., 2007, McGraw-Hill. A CD containing many of the slides used in the course and valuable for note-taking will be packaged with the textbook. **LAB MANUAL-** Harris-Haller, *Biology 101 Lab Manual*, 2nd edn. 2009, Hayden-McNeil Publishing Co.

LECTURE- MWF 9:10 to 10:00 a.m. in Biol. Sciences Bldg. East (BSBE) Room 115. Lecture notes will be posted at: <http://www.idmb.tamu.edu/biology101/> Approximately 25 POPQUIZZES, each typically worth 1 to 3 points, will be held in class **without prior notice!** As they are totally BONUS points, the instructor has **NO** obligation to provide any prior announcement of these quizzes, and there here will be **NO** opportunities to make-up these quizzes. **Attendance for the lectures IS NOT mandatory** but absence means that the opportunity for extra credits from POPQUIZZES will be lost.

LABORATORY- All lab sections meet in Heldenfels 305. Unlike lectures, **attendance at the laboratories IS mandatory.** There are no makeup labs. If you miss lab, you must notify your instructor within two class days and provide documentation of a university authorized absence within one week to be considered for a makeup assignment. See Lab Manual Appendix B for a 20 point bonus opportunity in lab:

EXAMS - DO NOT FORGET YOUR STUDENT ID! Exams I, II and III will be from 9:10 to 10:00 a.m. in BSBE 115, except for students with disabilities. You may **NOT** take any back-pack, notes or headgear (e.g. caps) to your desk - leave them at the side or front of the room. Exam I, Monday Sept 22; Exam II Friday Oct 17; Exam III; Monday Nov 10. NOTE: Exam IV will be from 8:00 to 10:00 (2 hr) on Monday, December 8. **EXAM REVIEW SESSIONS - 7:30 to 9:00 p.m.:** Thursday Sept 18; Tuesday Oct 14; Thursday Nov 6 (all in BSBE 115). The review for the Final Exam (December 1) will be in normal class time and place. **MISSED EXAM** If you know you will miss an exam for a university approved reason, please contact Dr. Hall as soon as possible and in any case no less than 2 working days prior to the exam. If you miss an exam, you must show **written** evidence within 1 week to substantiate the absence was for an accepted reason (section 7, Attendance, revised 2006 <http://student-rules.tamu.edu/>). The Lower Division Biology Program **DOES NOT** accept the Texas A&M University Explanatory Statement of Absence Form as an excused absence. **MAKE-UP EXAMS** will NOT be rescheduled without instructor permission and proof of an **authorized** absence. It is your responsibility to notify Dr. Hall of your absence, provide verification, and insure your name is on the sign-up list for the appropriate make-up exam. Make-up exams will only be offered on the following dates: (1) Thurs. Oct. 9; (2) Thurs. Oct. 30; (3) Thurs. Nov. 20. Make-up exams may consist of **essay and short answer questions.** All make up exams will be held at **5:30-6:30 p.m in Heldenfels 100.**

DETERMINE YOUR GRADE AS FOLLOWS: Note: Of the total possible points (600), 170 will be earned in the Laboratory.

LECTURE		LAB	
3 lecture examinations, 100 points each	300	Lab Quizzes/writeups, 12 at 10 points each	120
1 final examination (comprehensive)	<u>130</u>	Two laboratory reports at 15 points each	30
Sub Total	430	Lab participation points	<u>20</u>
		Sub Total	170

To determine your grade: Add points scored for Exams I through IV; add total lab points. To this total add the total PopQuiz bonus points. Divide this total by 6 to get a % score. Normally, 90-100% = A; 80-89% = B; 70-79% = C and 60-69% = D.

COMPUTER ACCESS INFORMATION- Please note that grade checks and exam challenges can only be made by computer application. Once you obtain a student ID with a universal identification number (UIN), then logon to <http://gateway.tamu.edu/> to activate your Neo NetID. Grade information will be posted online on Vista/Blackboard. Use your NeoID to login at <http://elearning.tamu.edu> to access your grades.

GRADE CHECKS & EXAM CHALLENGES - Requests for grade checks must be submitted via the Lower Division Biology Homepage at: <http://www.bio.tamu.edu/ldi>. You will be notified by email when a grade check is ready for pickup. Come to **315 Heldenfels** and show your **I.D.** to pickup a grade check. Exam challenges are submitted via an Exam Challenge Form at: <http://www.bio.tamu.edu/ldi>. All exam challenge forms will be forwarded to Dr. Hall for review.

ACADEMIC INTEGRITY: – “An Aggie does not lie, cheat or steal or tolerate those who do”. Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: <http://www.tamu.edu/aggiehonor/>.

Misconduct in research or scholarship includes fabrication, falsification, or plagiarism in proposing, performing, reviewing or reporting research. It does not include honest error or honest differences in interpretations or judgements of data. Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of the student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, is sufficient grounds to initiate an academic dishonesty case: <http://www.tamu.edu/aggiehonor/Student%20Rules/definitions.html>

Copyright: The handouts used in this course are copyrighted. "Handouts" are all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, in-class materials, class notes on the web, review sheets, problem sets and copy packets. You do not have the right to copy them unless you are expressly granted permission. As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please consult the latest issue of the *Texas A&M University Student Rules* under the section "Scholastic Dishonesty".

STATEMENT ON DISABILITIES: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation for their disabilities. If you believe you have a disability requiring accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall or call 845-1637.

BIOLOGY 101 - LECTURE AND LAB SCHEDULE - Fall 2008

BIOL 101 (3-3) MWF 9:10-10 a.m., BSBE 115

LAB: Heldenfels 305

INSTRUCTOR: Dr. Tim Hall tim@idmb.tamu.edu

OFFICE HOURS: W 10:15 am; F 2:00 pm

OFFICE LOCATION: BSBW 407

OFFICE PHONE: 845-7728

BOOKS & RESOURCES: Levetin & McMahon 5th ed; Harris-Haller, Biology 101 Lab Manual 2nd ed.

2009. Hayden-McNeil publishing; Website: <http://www.idmb.tamu.edu/Biology101/> Biology 101 Class notes (ppt).

Lecture Schedule and Subject		Reading Assignment	Lab Manual Exercises
1	Segment I - Plant basics		
Aug	25 M Seeds - Germination - roots stems leaves 27 W Plant Cell components; Tissues 29 F Cell division - Mitosis, Meiosis	See DVD Chapters 1-2 (1-30) See DVD	1. Cell Theory Seed germination setup
Sep	1 M Stems, Secondary growth 2 3 W Roots and Soils 5 F Lipids, membranes and membrane transport	Chapter 3 (35-37) Chapter 4 (49-52) Chapter 4 (50-54)	2. Cell Division (mitosis and meiosis) Turn in notes on germination
3	8 M Angiosperm life cycle (flowers) 10 W Angiosperm life cycle (Fruits and Seeds) 12 F Growth & Develop. - Hormones, Tropisms	Ch. 5 (72-87); Ch 6 (88-102)	3. Seedling Development Turn in notes on seedling development
4	15 M Biomolecules - DNA, replication 17 W Genetics - Mendel 18 R Exam I review session: 7:30 - 9:00p.m. 19 F Epigenetics - McClintock	Ch 1 (15-17); Ch 7 (113-117) Ch. 7 (104-111); 2 (26-28) See DVD; Ch. 12 (195)	4. The Theory of Heredity
5	22 M *** EXAM I *** (to McClintock) 24 W CHO Metabolism, Photosynthesis - Light 26 F Photosynthesis - Dark (C3, C4) Reactions	Ch. 4 (54-63) DVD	5. Enzymes
Oct	29 M Respiration 6 Segment II - Plant diversity	Ch. 4 (64-69)	6. Photosynthesis
7	01 W Algae 03 F Bryophytes	Ch. 22 (386-400) Ch. 9 (142-146)	
8	6 M Seedless Vascular Plants 8 W Seed Plants: Gymnosperms 10 F Grasses Classification	Ch. 9 (146-148) Ch. 9 (149-153) Ch. 12 (188-205)	7. Cellular Respiration
9	13 M Good fungi - Bad fungi 14 T Review session - 7:30 to 9:00 p.m. 15 W Legumes and starchy staples 17 F ***EXAM II*** (to Fungi)	Ch. 23-25 (403-463) Ch.13(208-218);Ch.14(221-234)	8. Non-seed bearing plants 9. Cone-bearing seed plants
10	Segment III - Biotechnology		
	20 M RNA and Transcription 22 W Gene structure 24 F Amino acids - Proteins	See DVD Ch. 7 (112-121) See DVD	10. Flowering Plant Anatomy
11	27 M Amino acids, Protein synthesis (translation) 29 W Gene Cloning and Biotechnology 31 F Gene synthesis and detection - PCR	See DVD; Ch. 7.2 (114-118) See DVD See DVD	11. Protein synthesis, DNA replication, transcription and translation
Nov	3 M Genetic Engineering of Plants 11 5 W Plant Tissue Culture 6 R Review session - 7:30 to 9:00 p.m. 7 F Transgenic Plants: Analysis	See DVD; Ch. 15 (249-250) See DVD; Ch. 15 (248-249) See DVD; Ch. 15 (250 - 260)	12. Transgenic Plants - week 1 Arabidopsis DNA isolation + PCR X-Gluc - GUS setup
12	10 M ***EXAM III*** (to Transgenic plants) Segment IV - Plants, Society & Civilization	Ch. 15 (235-248) Ch. 26 (465-490)	13. Transgenic Plants - week 2 Flash Gel - GUS analysis X-Gluc analysis
13	12 W Plant nutrition 14 F Ecology, Nutrient cycles		
14	17 M Biomes 19 W Evolution 21 F Origins of Agriculture	Ch. 6 (478-488) Ch. 8 (124-138) Ch. 11 (177-184)	14. Lick Creek Virtual field Trip and Campus Tour
15	24 M Flowering Plants and Civilization 26 W Feeding a Hungry World 28 F THANKSGIVING	See DVD. See DVD.	THANKSGIVING BREAK
Dec	1 M Review in lecture room 16 8 M ***FINAL EXAM*** from 8-10 a.m.		Dead Days Finals