

SYLLABUS – Marshall University
 Course Title/Number: **CELL AND MOLECULAR BIOLOGY FSC 600**
 Semester/Year: **Fall 2018**

Text (required): Cooper & Hausman, *Cell: A Molecular Approach*. Sinauer, 2016 7th Ed (or earlier editions)
 Days/Time: Thursday 10-11:30 am; Friday 12-1:30 pm. Location: Forensic Science Center, WW-1
 INSTRUCTOR: **Dr. Victor FET** Office: Science Building 206 (Main Campus), phone: (304) 696-3116;
 email: fet@marshall.edu

University Policies: By enrolling in this course, you agree to the *University Policies* listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802. *Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use / Inclement Weather/ Dead Week / Students with Disabilities / Academic Forgiveness / Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment.*

Course Description: The fundamental principles and mechanisms of cell and molecular biology (*Pre-requisites:* BSC 322 or BSC 365, suggested BSC 324 and CHM 355-356, or Instructor's approval) **3 credit hours.**
Assessment & Grading: 3 in-class tests @ 100 pts= 300 pts; 10 in-class quizzes @ 20 pts=200 pts; total 500 pts. SCALE (%): 90-100 A; 81-89 B; 71-80 C; 60-70 D; < 60 F

If you miss a quiz or a test you can make it up only if you have university excuse.

NO EXTRA CREDIT WILL BE GIVEN. *Plagiarism Policy/Academic Honesty:* plagiarism or cheating will not be tolerated, and will result in immediate dismissal (F grade).

Attendance is not mandatory, but you are absolutely and solely responsible for any material covered or announcements made in class. **PLEASE MAKE GOOD LECTURE NOTES !!!**

Please feel free to discuss with me any problems you might be having (email preferred).

<i>Course Student Learning Outcomes</i>	<i>How students will practice each outcome in this Course</i>	<i>How student achievement of each outcome will be assessed in this Course</i>
Students will be able to describe and explain major molecular mechanisms behind cell structures and function; describe and explain basic structure and function of informational molecules (DNA, proteins)	In-lecture discussion, in-class exercises, data problems	Graded assessments: in-class quizzes, exam questions

<u>Dates</u>	<u>Lecture Topic</u>	<u>BOOK CHAPTER</u>
Aug 23, 24	Introduction	Ch. 1
Aug 30, 31	Cell and Its Molecules -1	Ch. 2
Sept 6, 7	Cell and Its Molecules - 2	Ch. 2
Sept 13, 14	Fundamentals I - Heredity, Genes and DNA	Ch. 4
Sept 20, 21	Fundamentals II - Expression of Genetic Information	Ch. 4
Sept 27	Test 1	
Sept 28, Oct 4, 5	Genomics and Proteomics	Ch. 5
Oct 11, 12	Genes and Genomes	Ch. 6
Oct 18, 19	DNA Replication and Repair	Ch. 7
Oct 25	Test 2	
Oct 26, Nov 1	RNA Synthesis (Transcription) & Processing	Ch. 8
Nov 2, 8	Protein Synthesis (Translation)	Ch. 9
Nov 9, 15	Protein Processing and Regulation	Ch. 9
Nov 16	Test 3	
<i>Nov 17-24 THANKSGIVING BREAK</i>		
Nov 29, 30	Nucleus	Ch. 10
Dec 6, 7 "Dead week"	Mitochondria	Ch. 12
Final Test (comprehensive!): Thursday, December 13, 10:15 am-12:15 pm		