BIO 431.001_532.001. Molecular Biology
Hall – S228, W 16:00-18:50
Office Hours: S236, TW 13:00-15:30 or by appointment

Dr. Alexandra Martynova-Van Kley
Professor, Department of BIOLOGY
e-mail: avankley@sfasu.edu
Phone: 468-2569

WELCOME TO BIO431: 3 semester hours. This course is designed to introduce you to structure, function and organization of DNA, DNA replication, transcription, and translation of RNA. Mechanisms of gene expression and regulation. The class meets for 2 hours of lecture each week. All students will present a current paper from a scientific journal on one of the course topics according to schedule. Graduate students will have an independent project at the end of the term.

ATTENDANCE: You are expected to attend all lecture classes. It is vital that you read the chapter text prior to class as this will permit you to pose questions more efficiently. If you miss a lecture class for unavoidable reasons, make sure you get the notes from another student and visit my office.

Missing an exam will be permitted only by prior arrangement.

TEXTBOOK: Molecular Biology: Principles of Genome Function, by Nancy Craig et al.

GRADING CRITERIA:

- Lecture Exams (all together) - 50 pts
- Oral Presentation - 30 pts
- Participation/discussions - 10 pts
- Quizzes - 10 pts
- Attendance + course evaluation - Additional pts
- Independent project for grad. students - 50 pts

TOTAL – 100/150 pts

ORAL PRESENTATION: According to schedule students will present a current paper from a scientific journal on one of the course topics. The chosen papers need to be approved at least one week prior to the presentation week.

CELL PHONES, LAPTOPS AND OTHER ELECTRONIC DEVICES: All electronic devices MUST be turned off and PACKED AWAY during the lecture. Students using electronic devices during class will lose up to 10 points of their final grade. Any use of an electronic device during a test will be considered cheating.

Class web-page http://martynova-vankley.com/bio431_bio532/
user name: student
pass: biotech
### Date | Lecture topics | Handouts
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01/15 | Meeting with the class | 
01/22 | History of Discoveries in Molecular Biology | Lec1
01/29 | DNA/RNA and its structure | Lec2
02/05 | DNA replication | Lec3
02/12 | DNA replication - Presentations | 
02/19 | DNA damage/repair | Lec4
02/26 | DNA damage/repair - Presentations | 
03/04 | Exam | 
03/11 | Spring Break | 
03/18 | Transcription | Lec5
03/25 | Independent study | 
04/01 | Transcription | Lec6
04/08 | Transcription - presentations | 
04/15 | Translation | Lec7
04/22 | Translation | Lec8
04/29 | Translation - presentations | 
05/06 | Exam | 

### Academic Integrity (A-9,1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

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**Withheld Grades Semester Grades Policy (A-54)**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with Disabilities**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).