

Instructor: Dr. Tom Kieft **Website:** http://infohost.nmt.edu/~biology/people/faculty/t_kieft/

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Office hours: Mondays and Wednesdays 10-11. I'm often available at other times, too.

Learning Objectives. Following the completion of this course, students should have an appreciation for and understanding of

1. the chemistry of life: proteins, polysaccharides, nucleic acids, and lipids
2. the structure and function of cells
3. energy and metabolism in living systems.
4. cell division
5. heredity: the basics of Mendelian genetics
6. gene expression: transcription and translation

Textbook. We will cover these chapters in numerical order. You are responsible for keeping up with the reading. The required text is *Life, The Science of Biology, Vol. 1*, 10th Edition, by Sadava et al. The 9th edition of Sadava et al. Vol. 1 is acceptable, too. So are recent editions of the full version of *Life, The Science of Biology*. If you use a different edition, then you're responsible for figuring out which chapters to read. This shouldn't be difficult.

Online resources: Course materials on the web: Some course materials will be made available via Canvas (<https://nmt.instructure.com/>).

Course outline (tentative)

Topic	Reading in Sadava et al.
Introduction	Ch. 1
Chemistry of macromolecules	Chs. 2-4
Cell biology	Chs. 5-6
Energy and metabolism	Chs. 8-10
Cell cycle	Ch. 11
Genetics	Chs. 12-15

Exams and grading

Exams will cover material from the text and the lectures. Some required material in the text will not be covered in lectures. Each exam will cover mostly material since the last exam but some parts may be comprehensive.

There will be six exams. Your lowest test grade will be dropped. Your final grade will be based on the average of your five remaining test scores, with each one being given equal weighting (20%).

Tentative exam schedule:

Date
First exam: Feb. 3
Second exam: Feb. 24
Third exam: Mar. 24
Fourth exam: Apr. 12
Fifth Exam: April 28
Sixth Exam (comprehensive, during finals week): during finals week.

(The finals schedule is set by the Registrar; plan to be here throughout finals week.)

Course grades will be based on the following scale: 90-100% A, 80-89% B, 70-79% C, 60-69% D, ≤59% F. If necessary, the scale will be shifted down (curved) until the top 10% of students receive an A.

No make-up exams will be given. If a student misses one exam due to a bona fide illness or family emergency (must be documented via the Dean of Students), then the student's grade will be computed using the remaining exams. No extra-credit or alternative assignments will be given.

Academic honesty is expected of all students. Consult New Mexico Tech's Policy on Academic Honesty: (<http://www.nmt.edu/nmt-student-handbook-cs-student-academics?showall=&start=1>).

Turn off the ring tone on your phone. Put your phone away during class.

Attend class. Take notes. Ask questions. Read the textbook.