ACADEMIC CENTER FOR EXCELLENCE

ACE Study Resource – BIOL 1306

Syllabus:

To search for your course syllabus, follow these instructions.

1. Visit the following website: https://info.tamiu.edu/

2. Input your course (ex: MATH 1314) into the "Search" box and make sure you are in the current term (ex: Spring 2022). Click "Search."

3. Scroll down until you find your specific course (ex: MATH 1314.201) and professor's name.

4. Click on "Syllabus" under your course and the file will automatically download. You are done!

Textbook(s):

Urry, Lisa, et al. (2021) *Campbell Biology* (12th ed.). Pearson. ISBN: 9780135858141

Vodopich, Darrell & Moore, Randy. (2019) *Biology Laboratory Manual* (12th ed.). McGraw-Hill. ISBN: 9781260413335

Concepts:

- Chemistry of Life
- Cells membranes
- Metabolism
- Photosynthesis
- Mitosis
- Meiosis
- Evolution
- Levels of Organization
- Eukaryotic cells
- Prokaryotic cells
- Mendel and the Gene
- Gene Expression

Tips and Strategies:

- Attend class on time and participate.
- Read the textbook.
- Highlight key words in the text and write down their meaning in a notebook.
- For taxonomy order, remember the following mnemonic: Dear King Philip Came Over For Good Soup.
- Schedule tutoring sessions even if you think you have learned the material to further reinforce concepts.
- Study at least 2 weeks in advance.
- Submit your assignments on time.
- Ask questions to your professor and classmates.
- Look at previous assignments: use past exams as practice exams and grading progress.
- Use index cards for key terms to improve memorization and self-examinations.

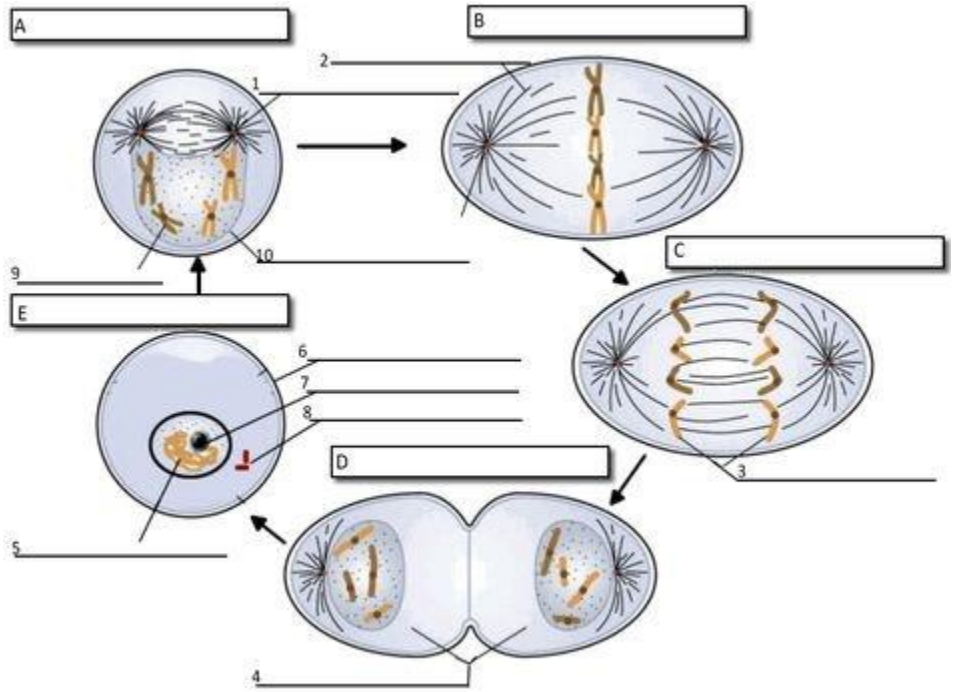
Resources:

- **Academic Center for Excellence Tutoring:** To book an appointment with visit our website, call (956) 326-4223, or send an email to academicsupport@tamiu.edu.
- **IBiology**
- **Khan Academy:** Biology
- **OpenStax:** Biology 2e

Practice and Application:

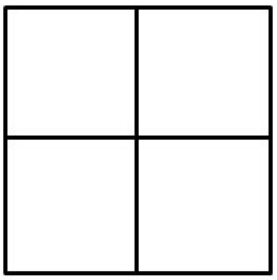
Below are practice problems to reinforce your knowledge of key course concepts.

1. Label the phases of mitosis (A-E) and the important parts that help mitosis occur (1 – 10).



2. Draw a Punnett Square for gene cross below. Then, list the offspring's genotypes.

Gene cross: **Rr and rr**



Offspring percentage:

RR:

Rr:

rr:

3. Answer the following questions:

- List three differences between prokaryotic and eukaryotic cells:

- Explain how passive and active transport works:

- What is glycolysis?

Disclaimer:

- Please use this document as a supplemental resource. You must follow class instructions and expectations set by your professor.
    - This guide does not substitute your class.
    - This guide does not cover the entire syllabus or course.