



Academic Inquiries: Jinan University

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# JINAN UNIVERSITY

## Introductory Biology

**Lecturer:** Patti R. Rose

**Time:** Monday through Friday (July 2, 2018 - August 3, 2018)

**Office hours:** 2 hours (according to the teaching schedule)

**Contact hours:** 50 (50 minutes each)

**Credits:** 3

**Location:** School of Tourism

**Office:** School of Tourism 210

**E-mail:** [drpattirose@gmail.com](mailto:drpattirose@gmail.com)

### Course Description:

Biological Science is all around us, and affects every aspect of our lives and every facet of life on Planet Earth.. The goal of this course is to furnish students with the basic foundation, information, and analytical tools necessary to grasp the fundamental concepts central to the study of biology.

This is a vast and highly diverse subject, and thus will require an overview approach in a short course such as this one. We will cover the most important areas in some detail, both in the classroom and in the laboratory, while striving to achieve a balanced view of the big picture ideas.

### Course Objectives:

To understand the basic concepts relevant to introductory biology including:

- the scientific method
- principles of evolution and the means by which evolution is studied.
- the structure of cells and explain the function of the cellular organelles
- the processes involved in cellular division
- ecosystem structure and function
- biological information

- various animal and plant systems and how they function

**Required Text:**

*Biology Today and Tomorrow, With Physiology*, 3rd Edition or 4th, by Starr, Evers, and Starr (published in 2010 by Cengage).

ISBN-10: 0495561576

ISBN-13: 9780495561576

**Course Hours:**

The course has 20 sessions in total. Each class session is 120 minutes in length. The course meets from Monday to Thursday.

**Grading Policy:**

This course is worth 100 points. Each student is responsible for demonstrating development and self-direction. Students are expected to attend all classes and complete all assigned work. Students are encouraged to set goals beyond those laid out in the syllabus. Absences beyond 2 class meetings will result in the course grade being lowered to the next lowest grade. For example a course grade of B will be lowered to B/C after two absences.

You will be given qualitative feedback in addition to your number score.

**Grading Scale**

Definition	Letter Grade	Score
Excellent	A	90-100
Good	B	80-89
Satisfactory	C	70-79
Poor	D	60-69
Failed	E	Below 60

## Course Policy

Students are expected to do **all** the readings for the week in their entirety before class meets on each Wednesday. In addition to reading the assigned material, you are required to think about the material and analyze it in comparison to other subjects under consideration. This will greatly enhance the value and quality of our classroom sessions. Use of cell phones, iPhones, any and all forms of Social Network activities, and any other electronic communication, games, or internet devices in class is strictly prohibited.

## Course Schedule

**NOTE: Our actual pace may be faster or slower than indicated on this schedule. We will spend more time on some chapters and subjects than on others. KEEP UP WITH OUR CLASSROOM DISCUSSIONS AND READ AHEAD ACCORDINGLY. IT IS BETTER TO READ AHEAD AND BE READY THAN TO FALL BEHIND AND BE UNPREPARED FOR OUR CLASSROOM DISCUSSIONS!**

### WEEK ONE:

1. Invitation to Biology.
2. Molecules of Life.
3. Cell Structure.
4. Energy and Metabolism.
5. Capturing and Releasing Energy.

### WEEK TWO:

6. DNA Structure and Function.
7. Gene Expression and Control.
8. How Cells Reproduce.
9. Patterns of Inheritance.
10. Biotechnology.

### WEEK THREE:

11. Evidence of Evolution.

12. Processes of Evolution.
13. Early Life Forms and the Viruses.
14. Plants and Fungi.
15. Animal Evolution.

**WEEK FOUR:**

16. Population Ecology.
17. Communities and Ecosystems.
18. The Biosphere and Human Effects.
19. Animal Tissues and Organs.
20. How Animals Move.
21. Circulation and Respiration.
22. Immunity.

**WEEK FIVE:**

23. Digestion and Excretion.
24. Neural Control and the Senses.
26. Reproduction and Development.
27. Plant Form and Function.
28. Plant Reproduction and Development.

**Academic Honesty**

Jinan University defines academic misconduct as any act by a student that misrepresents the student's own academic work or that compromises the academic work of another. Scholastic misconduct includes (but is not limited to) cheating on assignments or examinations; plagiarizing, i.e. misrepresenting as one's own work any work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of the instructors concerned; sabotaging authors' work. Within these general definitions, however, instructors determine what constitutes academic misconduct in the courses they teach. Students found guilty of academic misconduct in any portion of the academic work face penalties ranging from lowering of their course grade to awarding a grade of E for the entire course.