Seoul Campus 02450 서울특별시 동대문구 이문로 107 tel 02.2173.2093 fax 02.960.7898
107, Imun-ro, Dongdaemun-gu, Seoul, 02450, Korea
Global Campus 17035 경기도 용인시 처인구 모현면 외대로 81 tel 031.330.4114 fax 031.333.1708
81, Oedae-ro, Mohyeon-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, 17035, Korea

Hankuk University of Foreign Studies

2018 Summer Session

BIOL 101 Introduction to Biology with Lab

Course Outline

Course Code: BIOL 101

Instructor: TBA

Office Hours: By Appointment

Credits: 4

Class Hours:
This course will have 72 class hours, including 40 lecture hours, professor 10 office hours, 10-hour TA discussion sessions, 2-hour review sessions, 10-hour extra classes.

Course Description

This course will provide a general overview of several major fields of biology, including the organization of molecules, how information is passed through generations and used by living organisms, and how we can apply molecular tools to solve human problems.

Course Objectives

The main course goal is to allow students to reach a comprehensive understanding of the issues and methods in Biology, in order to decide whether to pursue studies in the field. In the process of reaching this goal, our objectives are that each student will:

Become familiar with current scientific theories and research in the major topic areas of Biology;
Discover the personal relevance of course material in their everyday and professional lives, in order to make fully informed decisions;

Develop the skills necessary to evaluate and think critically about information concerning biological phenomena obtained from research, the general public, and the media;

Seoul Campus 02450 서울특별시 동대문구 이문로 107 tel 02.2173.2093 fax 02.960.7898
107, Imun-ro, Dongdaemun-gu, Seoul, 02450, Korea
Global Campus 17035 경기도 용인시 처인구 모현면 외대로 81 tel 031.330.4114 fax 031.333.1708
81, Oedae-ro, Mohyeon-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, 17035, Korea

Be well prepared for advanced courses in Biology.

Required Textbooks

Human Biology - Concepts and Current Issues 6th ed - M. Johnson (Pearson, 2012)

Several readings will be required throughout the course, either to prepare for class or to complete an assignment. All materials will be posted online to provide a free and easy access to everyone.

Grading & Evaluation:

Assignments/Labs (30%) – Midterm exam (30%) – Final exam (40%)

Intermediary assignments will be posted throughout the course, to help students assess their needs and to ensure that all the important topics are well understood. Assignments and labs are also an opportunity for students to ask questions concerning unclear notions, as the main objective is not to grade but to help everyone reach an optimal level of comprehension.

Midterm and final exams will target all topics previously covered in class. Lecture notes, labs and assignments are important to succeed in the midterm and final exams, yet some questions will be specifically intended to stimulate students' critical thinking.

Attendance is extremely important for success in this class. It is expected that each student will commit fully to the assignments and readings required. Exams will cover the required texts as well as material presented or discussed in class.

Since scores on examinations reflect the student's ability, instructor's grading tendencies, and the difficulty of the test, a rigid contract grade schedule for this course would be inappropriate. However, this course will guarantee that these percentages will result in at least these letter grades. For example:

A	94-100	B+	88 – 89.99	C+	78 – 81.99	D	67 – 71.99
A-	90-93.99	B	85 – 87.99	C	75 – 77.99	D	64 – 66.99
		B-	82 – 84.99	C-	72 – 74.99	F	Below 64

Prerequisites

There are no formal prerequisites for this course, but we do presuppose high school-level biology and chemistry.

Seoul Campus 02450 서울특별시 동대문구 이문로 107 tel 02.2173.2093 fax 02.960.7898
107, Imun-ro, Dongdaemun-gu, Seoul, 02450, Korea
Global Campus 17035 경기도 용인시 처인구 모현면 외대로 81 tel 031.330.4114 fax 031.333.1708
81, Oedae-ro, Mohyeon-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, 17035, Korea

Course Policies

Academic Integrity – I expect nothing less. Cheating, fabrication, plagiarism or helping others to commit these acts will not be tolerated. Using any electronic devices or talking during an exam will be construed as cheating.

Cell Phones, Electronic Recording Devices, and Computers - All cell phones are to be turned off. Should a phone ring in class, I will be more than happy to answer that phone and talk to the caller. Anticipated emergency phone calls can be pre-arranged with the instructor, but the call must be answered outside of the classroom. Electronic recording devices for recording lectures must be pre-approved by the instructor. Computers for note taking only are permissible as a reasonable accommodation at instructor's discretion.

Respect - Please be respectful of your peers' thoughts and opinions. You are responsible for keeping your instructor updated on any information pertaining to you regarding this course. Check your email regularly for instructions.

Course Schedule:

Week 1:

Lecture 1: Course Introduction – Syllabus
Lecture 2: The Scientific Method: Basics & Core Principles
Lecture 3: Experimental Design in Science
LAB 1: Hypothesis Testing

Week 2:

Lecture 4: Genetics: Overview & Basic Principles
Lecture 5: DNA and Heredity
Lecture 6: Genome Editing
LAB 2: Introduction to Statistics

Week 3:

MIDTERM
Lecture 7: Physiological Systems
Lecture 8: Nervous System

Seoul Campus 02450 서울특별시 동대문구 이문로 107 tel 02.2173.2093 fax 02.960.7898
107, Imun-ro, Dongdaemun-gu, Seoul, 02450, Korea
Global Campus 17035 경기도 용인시 처인구 모현면 외대로 81 tel 031.330.4114 fax 031.333.1708
81, Oedae-ro, Mohyeon-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, 17035, Korea

LAB 3: Biological Systems

Week 4:

Lecture 9: Brain and Behavior
Lecture 10: Theory of Evolution
Lecture 11: Natural Selection, Mutation & Adaptation
LAB 4: Natural Selection in Action

Week 5:

Lecture 12: Analyzing Scientific Data
Lecture 13: Review
LAB 5: Data Analysis
FINAL EXAM