

GE1341: LIFE AND HEALTH

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Life and Health

Subject Code

GE - Gateway Education

Course Number

1341

Academic Unit

Biomedical Sciences (BMS)

College/School

Jockey Club College of Veterinary Medicine and Life Sciences (VM)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

GE Area (Primary)

Area 3 - Science and Technology

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course will allow students to discover the concept of life from a scientific point of view, with an emphasis on ways to live a healthy life. The course material includes some introduction to biology, biochemistry, and biotechnology. Issues related to the characteristics, origin and organization of a life will be taught. The importance of food and nutrition to maintain a healthy life will be discussed. The use of drugs, traditional Chinese herbs and cosmetics for maintenance or improvement of a life will be reviewed. The impacts of genetically modified (GM) food, fast food, common genetic problems and sexual behaviour will be discussed. The ethical issues and social impacts of cloning techniques and the latest development of stem cell research will also be addressed and discussed. Teaching and learning activities in this course, include interactive lectures, tutorial discussions, short projects, and presentations will enhance the students' knowledge relevant to life and health.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain the basic structure, complexity and the origin of life and how life adapts to different environments	20	x		
2	Discuss the health and social issues related to the use of fast food, traditional Chinese medicines, western drugs, and chemical substances	30	x		
3	Analyse and discuss the implications of diet habit and life style to health.	20		x	
4	Discover some health problems due to substance abuses, microbial infection and genetic changes	20		x	x
5	Critically evaluate the impact of technological developments, such as genetically modified good, stem cell research and cloning on social aspects	10		x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

	TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures & Tutorials	Interactive lectures, tutorial discussions to explain and demonstrate the biological aspects of human body functions	1, 2, 3, 4, 5	
2	Projects	Interactive projects on different issues by means of writing an essay or poster presentation to enhance students' ability to analyse and identify problems or implications in connection to food, use of drugs and substances, microbial or common genetic diseases	2, 3, 4, 5	
3	Class discussion	Interactive discussions and participation in online forums on current societal and scientific topics will enhance students' communication skills and debate skills	2, 4, 5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Quizzes after lectures	1, 2, 3, 4	70	
2	Workshop or poster/ platform presentation	1, 2, 3, 4, 5	20	
3	Class discussion, assignments, and attendance	2, 4, 5	10	

Continuous Assessment (%)

100

Examination (%)

0

Additional Information for ATs

Minimum Passing Requirement: A minimum of 40% in Continuous Assessment.

Assessment Rubrics (AR)**Assessment Task**

1. Quizzes after lectures

Criterion

The number of correct answers.

Excellent (A+, A, A-)

Correctly answered >75% of the questions. Well organised text and coherent logic.

Good (B+, B, B-)

Correctly answered >60% to 74% of the questions.

Fair (C+, C, C-)

Correctly answered 45% to 59% of the questions.

Marginal (D)

Correctly answered 40% to 44% of the questions.

Failure (F)

Did not hand in the assignment on time. Or correctly answered < 40% of the questions.

Assessment Task

2. Essay or poster/platform presentation

Criterion

The content and the style of the essay or poster presentation. Handling of questions.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

3. Class discussions or assignments

Criterion

The content of the discussions. ABILITY to CRITICALLY COMMENT on the potential and prospect of biotech, life science and food industries in Hong Kong.

Excellent (A+, A, A-)

Subject is well defined and the content is well organised. The writing is logical and coherent.

Good (B+, B, B-)

The content is substantial. The writing is logical and coherent.

Fair (C+, C, C-)

The content is sufficient. The writing is easy to understand.

Marginal (D)

The content is correctly presented but lacks details. The writing is not easy to understand.

Failure (F)

Did not hand in the writing on time. Or the subject is poorly researched.

Part III Other Information

Keyword Syllabus

- Characteristics, biodiversity and origins of life;
- Basic structure and natural propagation of life;
- Nutrition and dietary habit in relation to health;
- genetically modified food, fast food and eating disorder;
- Substance abuse and health;
- Common genetic Problems and diseases, stem cell research;
- Micro-organisms and health;
- Brain Functions and its links to health;
- Drug medication and Traditional Chinese medicines versus Western Medicines; Poster or topical presentations

Reading List

Compulsory Readings

Title	
1	Mader, S. & Windelspecht, M. (2017) Human Biology. 15th Ed. New York, NY: McGraw Hill.
2	Mary Larkin. Larkin, Mary (2013). Health and well-being across the life course. London : SAGE.
3	Johnson, M.D. (2017) Human Biology: Concepts and Current Issues, Global Edition. 8th Ed. New York, NY: Pearson.

Additional Readings

Title	
1	Nil

Annex (for GE courses only)

A. Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:

Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)

PILO 1: Demonstrate the capacity for self-directed learning

1, 2, 3, 4, 5

PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology

2, 3, 5

PILO 3: Demonstrate critical thinking skills

2, 3, 4, 5

PILO 4: Interpret information and numerical data

1, 2, 3, 4, 5

PILO 5: Produce structured, well-organised and fluent text

1, 2, 3, 4, 5

PILO 6: Demonstrate effective oral communication skills

1, 2, 3, 4, 5

PILO 7: Demonstrate an ability to work effectively in a team

1, 2, 3, 4, 5

PILO 9: Value ethical and socially responsible actions

2, 3, 4, 5

PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation

2, 3, 4, 5

B. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.

Selected Assessment Task

Informational article, assignments, or poster/platform presentation