المركز الوطني للتقويم والاعتماد الاكاديمي
National Center for Academic Accreditation and Evaluation

ATTACHMENT 5.

T6. COURSE SPECIFICATIONS (CS)

هيئة تقويم التعليم
Education Evaluation Commission

Course Specifications

Institution: **University of Tabuk KSA**	Date:
College/Department : **Ummlaj University College/ Department of Biology**	

A. Course Identification and General Information

1. Course title and code: **Epidemiology & BIO 452**
2. Credit hours:**3**
3. Program(s) in which the course is offered.
(If general elective available in many programs indicate this rather than list programs)
Biology
4. Name of faculty member responsible for the course:
5. Level/year at which this course is offered: **8/ 1439-40 H**
6. Pre-requisites for this course (if any): **Immunology Bio 430**
7. Co-requisites for this course (if any):**None**
8. Location if not on main campus:
9. Mode of Instruction (mark all that apply):

a. traditional classroom	✓	What percentage?	75
b. blended (traditional and online)		What percentage?	
c. e-learning		What percentage?	
d. correspondence		What percentage?	
f. other (lab work)	✓	What percentage?	25

Comments:

B Objectives

1. What is the main purpose for this course?

- **Describe key features and applications of descriptive and analytic epidemiology.**
- **Calculate and interpret ratios, proportions, incidence rates, mortality rates, prevalence, years of potential life lost, mean, median, mode, ranges, variance, standard deviation and confidence interval.**
- **Prepare and apply tables, graphs, and charts such as arithmetic-scale line, scatter diagram, pie chart, and box plot.**
- **Describe the processes, uses, evaluation of public health surveillance and the steps of an outbreak investigation.**

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- ✓ **The course contents will be periodically reviewed by the instructors to include new materials of relevance and improved teaching method.**
- ✓ **Take advantage of the technical programs, workshops and seminars in the field of entomology and epidemiology**

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description: The course includes an introduction to Epidemiology, frequency measures, calculation and interpretation of ratios, proportions etc., measuring central location and other statistical parameters, organizing epidemiologic data, preparing tables, graphs, and charts, public health surveillance and investigating an outbreak.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Introduction	1	2
Key features and applications of descriptive epidemiology.	1	2
Key features and applications of analytical epidemiology& QUIZ	1	2

Frequency Measures Used in Epidemiology. Calculation and interpretation of ratios, proportions, incidence rates and mortality rates.	1	2
Frequency Measures Used in Epidemiology. Calculation and interpretation prevalence, and years of potential life lost.	1	2
MID TERM	1	2
Measures of Central Location and Dispersion. Calculation and interpretation of mean, median, mode, and ranges.	1	2
Measures of Central Location and Dispersion. Calculation and interpretation of variance, standard deviation, and confidence interval.	1	2
Organizing Epidemiologic Data. Preparation and application of tables, graphs, and charts such as arithmetic-scale line and scatter diagram.	1	2
Organizing Epidemiologic Data. Preparation and application of tables, graphs, and charts such as pie chart, and box plot.	1	2
Public Health Surveillance. Process, uses, and evaluation of public health surveillance in KSA.	1	2
Investigating an Outbreak. Steps of an outbreak investigation (I).	1	2
Investigating an Outbreak. Steps of an outbreak investigation (II).	1	2
Revision	1	2

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planed	26			26		52
	Actual	24			26		50
Credit	Planed	2			1		3
	Actual						

3. Additional private study/learning hours expected for students per week. 6

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Provide knowledge about applications of descriptive epidemiology	Structured course materials delivered through a sequential delivery of lectures, with an introductory lecture focusing on the significance of the course	Exams and assignment are used to assess the acquired knowledge on the subject.
1.2	Provide knowledge about applications of analytical epidemiology	Interactive learning process through questions and answers in class.	Short quizzes at the end of each topic are used to evaluate the student understanding.
2.0	**Cognitive Skills**		
2.1	Students will be able to understand calculation and interpretation of ratios, proportions, incidence rates and mortality rates	Lectures are followed by numerous examples, some of which are practical in nature.	Exams and assignment will include question, answers of which requires critical thinking and remembrance.
2.2	To be able to understand calculation and	Explain by case study and demonstrating	Class discussion.

	interpretation prevalence, and years of potential life lost.	live examples.	
3.0	**Interpersonal Skills & Responsibility**		
3.1	Students will do case study of various epidemics.	Assignment is given to the students at regular intervals for them to solve and submit. 10% of the final grade is allocated to the assignments. Late or no submission of assignments carries penalties or loss of grade points.	Class attendance of students at the beginning of the lecture is recoded.
3.2	Student will take the responsibility to solve given assignments on their own and submit on time.	Participation of students in classroom discussion.	Recording of submission of assignment and the grades.
4.0	**Communication, Information Technology, Numerical**		
4.1	Students will develop the ability to apply basic knowledge calculation and interpretation of mean, median, mode, and ranges.	Questions of tests and assignments require students' knowledge in biology.	Their ability to solve the problem by correct interpretation and their depth of understanding.
4.2	Communicate effectively with her class mates and discuss case studies.	A clear identification of epidemic spread and its control measures	Through the students' aggregate score in all tests, assignments and Group discussions.
5.0	**Psychomotor**		
5.1	Public Health Surveillance. Process, uses, and evaluation of public health surveillance in KSA.	A clear idea of examining and analyzing the root cause of the problem will be given and the students will prepare an in-depth report based on it.	Through the students' Report assignments.

5. Schedule of Assessment Tasks for Students During the Semester: none

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	**Assignment**	Distributed over 8 weeks	10%
2	**Quizzes**	10	10%
3	**Mid-term exam**	10	25%
4	**Lab exam**	14	15%
5	**Final Exam**	15	40%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week) **-Office hours 10 hrs./week**

E Learning Resources

1. List Required Textbooks: Melissa M. A.; Greg R. Al.; Russell S. K. and Martha S. W. (2008): Perinatal Epidemiology for Public Health Practice. Springer. **ISBN-10:** 0387094385.	
2. List Essential References Materials (Journals, Reports, etc.) • Principles of EPIDEMIOLOGY, Second Edition (SELF-STUDY Course 3030-G), An Introduction to Applied Epidemiology and Biostatistics, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • Handouts given by the Instructor	
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) http://www.epidemiolog.net/epid160/lectures/	
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) 1. http://en.wikipedia.org/wiki/epidemiology 2. http://www.epidata.dk/index.htm	
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.: Search through Google, science direct.com and Wikipedia for related topics.	

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access,etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) : To Accommodate 45 students
2. Computing resources (AV, data show, Smart Board, software, etc.): Internet facility in the class rooms. Other facilities are available.
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) **:**Case study materials from the health centers**.** A trip to local health center

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching **Course evaluation forms are filled by the students, they are as follows,** **PES: Program evaluation survey** **SES: Students experience survey** **CES: Course evaluation survey**
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor **Faculty assessment of the course and effectiveness of teaching delivery.** **Periodic self- assessment of the program.**
3 Processes for Improvement of Teaching **Undergraduate Committee will review deficiencies based on the student evaluation, faculty input, course file, and program assessment.** **Organize workshop on effective teaching methods to enable instructors to improve their teaching skill.** **Teaching method will focus on students' learning and on course learning outcomes.**
3. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) **Under graduate Committee will review samples of student work in this course to check on the standard of grades and achievements.** **A faculty member from requital university will evaluate the course material and the students' work to compare the standard of grades and achievements with those at his university**.
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

Self- assessment at every years and the external assessment by the invited faculty member will be carried out. The feedback received from these assessments will be used to plane for further improvement in the course syllabus, teaching method, and delivery of course materials.

Name of Course Instructor:

Signature: Date Specification Completed:

Program Coordinator:

Signature: _____ Date Received:_____