Course Specification

Occupational Health and safety

Course Specification

Institution: **Umm Al-Qura University**
College/Department: **College of Public Health and Health Informatics/Department of Environmental Health**

A. Course Identification and General Information

1. Course title and code: **Occupational Health and Safety (4607325-3)**
2. Credit hours :3 hours (3+0)
3. Program(s) in which the course is offered. Bachelor of Science in Environmental Health
4. Name of faculty member responsible for the course : will be appointed later
5. Level/year at which this course is offered : Third Year/Second Semester
6. Pre-requisites for this course (if any): None
7. Co-requisites for this course (if any): None
8. Location if not on main campus : College building at Alshawqia

B. Objectives

1. Summary of the main learning outcomes for students enrolled in the course. 1. Understanding the terminology and concepts of occupational health and industrial hygiene 2. Realizing the route of exposures and toxicity of substances generated in workplace 3. Recognizing the chemical, physical and biological hazards found in workplace 4. Understanding the different measures used to prevent and control hazards 5. Realizing the exposures standards and regulations adopted to protect the workers from health hazard
2. Briefly describe any plans for developing and improving the course that are being

implemented. (eg increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Increase use of the web based materials related to each lecture
- Use of University online library to download the available references
- The class teaching materials can be accessed through the web

C. Course Description (Note: General description in the form to be used for the Bulletin or Handbook should be attached)

1. Topics to be Covered		
List of Topics	**No of weeks**	**Contact hours**
Introduction to occupational health and Safety	1	3
Occupational health and toxicology	1	3
Chemical hazard	2	6
Physical hazard , Psychosocial Factors and Work Organisation	2	6
biological hazard	2	6
Hazard evaluation and risk assessment	1	3
Control of workplace health hazard	2	6
Exposure standards and regulations	1	3
Field visit	1	3
Role of health education and promotion in occupational health	1	3
Course Review	1	3
Total	**15**	**45**

2. Course components (total contact hours per semester):				
Lecture: 45 hours	Tutorial: -----	Laboratory:	Practical/Field work/Internship:	Other:

3. Additional private study/learning hours expected for students per week. (This should be an average : for the semester not a specific requirement in each week)

3 hours/week

4. development of Learning Outcomes in Domains of Learning
For each of the domains of learning shown below indicate:

- A brief summary of the knowledge or skill the course is intended to develop;
- A description of the teaching strategies to be used in the course to develop that

knowledge or skill;

- The methods of student assessment to be used in the course to evaluate learning outcomes in the domain concerned.

a. Knowledge

(i) Description of the knowledge to be acquired

This course is designed to provide students with basic knowledge on

- Explain the terminology and concepts related to occupational health and industrial hygiene
- Discuss the route of exposures and toxicology of substances generated in workplace
- Describe the chemical, physical and biological hazards in workplace
- explain the different methods of hazard control
- Discuss the role of regulations in minimizing and prevention of health hazard

(ii) Teaching strategies to be used to develop that knowledge

- lectures
- assignments
- field visit

(iii) Methods of assessment of knowledge acquired

- assignment report
- field visit report
- tests
- final exam

b. Cognitive Skills

(i) Description of cognitive skills to be developed

On completion of this course the student should be able to

- identify the health hazards found in workplace
- calculate exposures in workplace

- apply exposure standards and regulations
- conduct research related to occupational health and industrial hygiene
- prepare reports based on scientific data collection and analysis
- develop integrated program to ensure safe workplace environment

(ii) Teaching strategies to be used to develop these cognitive skills

- assignments
- field visit
- class lectures

(iii) Methods of assessment of students cognitive skills

- assignment report
- field visit report
- tests and final exam

c. Interpersonal Skills and Responsibility

(i) Description of the interpersonal skills and capacity to carry responsibility to be developed

After successful completion of the course, students should be able to

- work independently and as a part of the team
- complete the assignments at the due time
- behave responsibly and ethically as a leader or member of group

(ii) Teaching strategies to be used to develop these skills and abilities

- assignments
- field visits

(iii) Methods of assessment of students interpersonal skills and capacity to carry responsibility

- participation and leadership during the preparation of assignments and field visit

d. Communication, Information Technology and Numerical Skills

(i) Description of the skills to be developed in this domain.

At the end of this course, students are expected to

- communicate in both Arabic and English orally, electronically or by writing
- use MS office software

- collect the pertinent source materials from the web

(ii) Teaching strategies to be used to develop these skills

- class lectures
- assignment
- practical sessions

(iii) Methods of assessment of students numerical and communication skills

- class lectures discussion participation
- assignment reports preparation and presentation
- practical report
- use of the computer software
- use of web reference materials
- e-mail communication with the course instructor

e. Psychomotor Skills (if applicable)

(i) Description of the psychomotor skills to be developed and the level of performance required

Not applicable

(ii) Teaching strategies to be used to develop these skills
Not applicable

(iii) Methods of assessment of students psychomotor skills
Not applicable

5. Schedule of Assessment Tasks for Students During the Semester

Assessment	Assessment task	Week due	Proportion of final assessment
1	Group assignments	4^{th}, 8^{th}, 10^{th},14^{th} weeks	10%
2	Quizzes	5^{th} , 9^{th}, 11^{th} , 13^{the} week	10%
3	First test	6^{th} Week	15%
4	Second test	12^{th} Week	15%
5	Final exam	15^{th} Week	50%

D. Student Support

1. Arrangements for availability of teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

- students can consult the teaching staff during the office hours which can be 6 hours/week
- students can communicate with the staff through the web

E. Learning Resources

1. Required Text(s):
   - Cherilyn Tillman, Principles of occupational health and hygiene: an introduction, Allen & Unwin, 2007.

2. essential references:
   - Benjamin O. Alli, Fundamental principles of occupational health and safety, International Labour Organization, 2008.
   - World Health Organization, Occupational Health: A manual for primary health care workers, WHO, 2001.

3. Recommended Books and Reference Material (Journals, Reports, etc) (Attach List)
   - Journal of Occupational Health Psychology
   - Journal of Occupational Health
   - Occupational and Environmental Medicine (OEM)
   - Archives of Environmental & Occupational Health
   - International Journal of Occupational and Environmental Health

4. electronic materials, Web Sites etc
   - http://www.who.int/topics/occupational_health/en/
   - *http://www.ilo.org/global/lang--en/index.htm*
   - http://www.osha.gov/
   - http://www.cdc.gov/niosh/
   - http://www.ccohs.ca/
   - http://www.atoshealthcare.com/services/occupational_health
   - http://www.ttl.fi/en/Pages/default.aspx

5. other learning materialssuch as computer-based programs/CD, professional standards/regulations
Not needed

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (ie number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Lecture rooms, laboratories, etc.) • Classroom as large as possible to accommodate all student
2. Computing resources • Computer should be available along with data show in classroom • Computer lab should be available to students to access the internet materials
3. Other resources (specify --eg. If specific laboratory equipment is required, list requirements or attach list) Not needed

G. Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching • Students feedback through questionnaire • Discussion between student group and course instructor
2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department • Instructor self-assessment • Senior faculty member and departmental committee consultation
3. Processes for Improvement of Teaching • Involvement in teaching methods workshop • Involvement in training programs
4. Processes for Verifying Standards of Student Achievement (eg. 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) Check marking the students work (tests and assignments) with other examiners from the college or other institution
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. • Based on the course assessment by the instructor, departmental committee and students, the weak points can be identified and through the consultations and discussions the inefficiencies can be avoided. • The assessment and review will be conducted through and at the end of the semester