

SPPH 566

**Course description:**

**SPPH 566: Occupational Hygiene Practice, Fall 2017**

**Instructors:** Mona Shum, MSc, CIH (778-242-8138) [mona.shum@aurahhealthsafety.com](mailto:mona.shum@aurahhealthsafety.com)

**Classes:** Monday (SPPH 325) and Thursday 1:00 – 2:30 (SPPH 308B)  
(plus much more time and many other places).

**Objectives:** The purpose of this course is to provide an opportunity for students to apply hygiene concepts in a real work site. Students will work in teams. Upon completion of this course the student will be able to conduct a walk-through evaluation of a work site, determine which elements of a site require evaluation, develop a sampling strategy, prepare a sampling budget, perform evaluations including laboratory analyses, interpret the results, recommend and budget control measures, deliver written and oral reports to work-site representatives and comfortably interact with labour, management, and professionals in a variety of fields.

**Course Format:** the course will include meetings, field surveys, laboratory analyses, and consultations with management, labour and health and safety professionals.

**Evaluation:** The mark for this class will be pass/fail. Evaluation will be based on each student's contribution to the team, the team presentations to the work site health and safety committee and to UBC faculty, and the final written report by the team.

**Work Site:** Animal Care Facilities (CDM, MBF, and CCM)

**Site contact:**

**CDM** – Life Sciences Building - Diana Carlson (ph: 604-827-4319; [diana.carlsen@ubc.ca](mailto:diana.carlsen@ubc.ca)) and Gordon Gray (ph: 604-822-6818 / 604-813-3706 [gordon.gray@ubc.ca](mailto:gordon.gray@ubc.ca)).

**MBF** – Pharmaceutical Sciences Building basement - Sarah Hulme (ph: 604-827-1506 / 778-899-3413; [shulme@mail.ubc.ca](mailto:shulme@mail.ubc.ca))

**CCM** - 4145 Wesbrook Mall - Gordon Gray (ph: 604-822-6818 / 604-813-3706 [gordon.gray@ubc.ca](mailto:gordon.gray@ubc.ca)).

**SPPH 566 – Tentative Fall Schedule**

Week #	Day	Date	Location	Content
1	Thurs	Sept 7	UBC	Introduction to course; prep for initial site visit
2	Mon	Sept 11	Field	Site Visits Process description; review of potential hazards. Initial selection of hazards to assess; further information required
	Thurs	Sept 14	UBC	Site Visits
3	Mon	Sept 18	UBC	Measurement method investigation; hazard identification and assessment, selection of hazards to assess & definition of work teams Discussion with site HSE personnel. Obtain any additional information required to develop sampling strategy.
	Thurs	Sept 21	UBC	Sampling strategy development; data from design; sampling (mock) budget preparation
4	Mon	Sept 25	UBC	Finalize sampling strategy and budget, develop presentation for UBC faculty and site personnel.
	Thurs	Sept 28	Field	Presentation of sampling strategy to UBC faculty
5	Mon	Oct 2	UBC lab	Presentation of sampling strategy to worksite HSE personnel
	Thurs	Oct 5	UBC Lab	Revise sampling plan based on feedback from UBC faculty and worksite HSE personnel. Develop outline for report.
6	Mon	Oct 9		Thanksgiving
	Thurs	Oct 12	UBC	Choice of sampling equipment, learn set up and downloading
7	Mon	Oct 16	UBC	Choice of sampling equipment, learn set up and downloading
	Thurs	Oct 19	UBC	Outline report sections, final preparation for sampling.
8	Mon	Oct 23	Field/lab	Sampling/ analysis (schedule TBD)
	Thurs	Oct 26	Field/lab	Sampling/ analysis (schedule TBD)
9	Mon	Oct 30	Field/lab	Sampling/ analysis (schedule TBD)
	Thurs	Nov 2	UBC	Sampling/ analysis (schedule TBD)
10	Mon	Nov 6	UBC	Evaluation of results against exposure standards and health outcome data from the scientific literature; final report
	Thurs	Nov 9	UBC	Evaluation of results; limitations of measurement data
11	Mon	Nov 13	UBC	Controls brainstorming; final report
	Thurs	Nov 16	Field	Controls critique, budget and feasibility evaluation at worksite
12	Mon	Nov 20	UBC	Final report to UBC faculty
	Thurs	Nov 23	UBC	Revisions, discussion of report
13	Mon	Nov 27	Field	Final report to work site HSE personnel
	Thurs	Nov 30	UBC	Feedback
14	Mon	Dec 4	UBC	Submit final report

Thursday, September 7, 2016

**Introduction to SPPH 566 “Occupational and Environmental Hygiene Practice”**

Tentative Agenda:

1. Approval of agenda
2. Welcome
3. Course overview (documentation attached)
  - a. Objectives
  - b. Schedule
  - c. Evaluation
  - d. Ethics
4. Project management
  - a. Discuss elements of project management
  - b. Identify roles
    - i. Project Manager
    - ii. Assistant Project Manager
    - iii. Project Coordinators (after key hazards identified)
    - iv. Editor
    - v. Meeting Chair
    - vi. Secretary
    - vii. Senior Manager (Mona)
    - viii. Senior Reviewer(s) (Professors)
  - c. Establish file share system (UBC host preferred)
  - d. Establish email list
  - e. Budget
5. Meeting management
  - a. Set usual meeting day
  - b. Meeting chair
  - c. Meeting minutes
6. Site Information
  - a. Introduction
  - b. Discussion of possible hazards
  - c. Site visit September 11<sup>th</sup> at 12:30 pm to 2:30 pm and 14<sup>th</sup> at 1 pm to 2 pm.
7. New business
8. Next meeting

## Schedule of Tours

Date	CDM	MBF	CCM
Sept 11	12:30 -1:30 pm (Life Sciences lobby near elevators)	1:30 – 2:30 pm (Pharmaceutical Sciences near double elevators in lobby area near Pharmacy display cases along Agronomy Road)	----
Sept 14			1:00-2:00 pm (4145 Wesbrook Mall reception)

Note: Students need 5 minutes to get from one tour to the other

### Some considerations, advice and responsibilities:

#### Project Manager:

- Has responsibility for planning and execution of the project
- Works with the project team to ensure project is completed to satisfaction on time and on budget
- Liaises with the client
- Provides weekly update reports to Senior Manager (can be verbal/email)
- Provides periodic update report to Client (various forms)

#### Assistant Project Manager (optional):

- Budgeting, scheduling.
- Assists Project Manager with his/her duties
- Steps in for Project Manager when necessary

#### Project Coordinators:

- Once priority hazards are identified, and teams are formed, a project coordinator of each team will be chosen to have responsibility for ensuring that their tasks are completed on time and on budget
- Provide periodic updates to the project manager
- Coordinate with the labs and equipment rental companies (if necessary)

#### Editor

- With project team, outlines the project plan template, presentations, and report.
- Develops a template for each deliverable that project team members follow
- Reviews the content of each section of the deliverables (written by the project team) and edits for consistency and style

#### Chair (rotates):

- Start meeting on time
- Record important discussion points on board

- Ensure full participation of all class members in decision-making
- Ensure decisions are made
- Make sure entire agenda is covered
- Set agenda for next meeting

#### Secretary (rotates):

- Record information from blackboard
- Record important decisions
- Record duties/action items for next meeting, and indicate who is responsible (action items)
- Write above in minutes, copy for us (send by email) and binder, by the end of the day
- Record agenda for following meeting, to be handed out at end of meeting (distribute by email)

#### Senior Manager (Mona):

- Has ultimate responsibility for the project (course)
- Manages the client relationship and team relationships when there are issues that arise
- Receives update reports on status of project
- Advises and consults with project manager and team
- Reviews interim and final deliverables (including project plans, budget, schedule, presentations, reports, etc.)

#### Senior Reviewers (Other Professors):

- Provide technical expertise in their disciplines
- Review interim and final deliverables, as required
- Ensure that the final deliverables are in keeping with UBC standards and policies

#### Everyone:

- Importance of making decisions quickly – develop a “consulting firm” mentality
- Do not repeat old ground in meetings (chair to enforce this)
- Limit the number of hazards selected for evaluation
- Difficult to change groups after beginning of course
- Everyone must attend meetings and field visits
- Ensure participation in class
- Work as a team – important for future career
- Work with lab manager to complete plan for equipment and supplies, laboratory
- Scheduling requirement
- Have tracking plan for equipment, supplies and samples
- Stick to the schedule as closely as possible; take due dates seriously!
- Begin working on final report as soon as sampling plan is set

## Joint Industrial Hygiene Associations

### Member Ethical Principles

The AIHA, ACGIH and AIH (IH Professional Associations) are nonprofit voluntary professional membership associations dedicated to the advancement of the field of industrial hygiene, and the protection of health and safety. Therefore, the IH Professional Associations support quality professional standards and practices and expect members to meet such standards. In support of these important purposes, the IH Professional Associations promote ethical professional practices and strongly encourage members to understand ethical responsibilities. As a matter of professional competence and public confidence, members are expected to conduct themselves consistent with applicable ethics standards, including those of the American Board of Industrial Hygiene (ABIH).

Accordingly, the IH Professional Associations have adopted the following member ethical principles in order to guide the members, support the profession, and protect health and safety.

- I. Responsibilities to the Professional Organization, the Profession and the Public:
  - A. In order to satisfy organizational and legal policies and rules, members should:
    1. Comply with laws, regulations, policies, and ethical standards governing professional practice of industrial hygiene and related activities, including those of professional associations and credentialing organizations.
    2. Provide accurate and truthful information to professional associations and credentialing organizations.
    3. Cooperate with professional associations and credentialing organizations concerning ethics matters and the collection of information related to an ethics matter.
    4. Report apparent violations of applicable professional organizations' ethical standards to appropriate organizations and agencies upon a reasonable and clear factual basis.
    5. Refrain from any public behavior that is clearly in violation of accepted professional, ethical or legal standards.
    6. Promote equal opportunity and diversity in professional activities.
    7. Support and disseminate the association's ethics principles to other professionals.
- II. Responsibilities to Clients, Employers, Employees and the Public.
  - A. *In order to provide ethical professional service, members should:*
    1. Deliver competent services in a timely manner, and with objective and independent professional judgment in decision making.
    2. Recognize the limitations of one's professional ability, and provide services only when qualified.
    3. The member is responsible for determining the limits of his/her own professional abilities based on education, knowledge, skills, practice experience and other relevant considerations.
    4. Provide appropriate professional referrals when unable to provide competent professional assistance.

5. Maintain and respect the confidentiality of sensitive information obtained in the course of professional or related activities unless: the information pertains to an illegal activity; a court or governmental agency lawfully directs the release of specific information; the client/employer expressly authorizes the release of specific information; or, the failure to release such information would likely result in death or serious physical harm to employees and/or the public.
  6. Properly use professional credentials and provide truthful and accurate representations concerning education, experience, competency and the performance of services.
  7. Provide truthful and accurate representations to the public in advertising, public statement/representations, and in the preparation of estimates concerning costs, services, and expected results.
  8. Recognize and respect the intellectual property rights of others, and act in an accurate, truthful, and complete manner, including activities related to professional work and research.
  9. Affix or authorize the use of one's seal, stamp or signature only when the document is prepared by the certificate/candidate or someone under his/her direction and control.
  10. Refrain from business activities and practices that unlawfully restrict completion.
- B. In order to satisfy organizational policies and legal requirements concerning possible conflicts of interest and similar issues, members should:*
1. Disclose to clients or employers significant circumstances that could be construed as a conflict of interest, or an appearance of impropriety.
  2. Avoid conduct that could cause a conflict of interest with a client, employers, employee, or the public.
  3. Assure that a conflict of interest does not compromise legitimate interests of a client, employer, employee, or the public and does not influence/interfere with professional judgments.
  4. Refrain from offering, or accepting inappropriate payments, gifts, or other forms of compensation or benefits in order to secure work, or that are intended to influence professional judgment.
- C. In order to satisfy organizational policies and legal requirements concerning public health and safety, members should:*
1. Follow appropriate health and safety procedures in the course of performing professional work to protect clients, employers, employees, and the public from conditions where injury and damage are reasonable foreseeable.
  2. Inform appropriate management representatives and/or governmental bodies of violations of legal and regulatory requirements when obligated or otherwise clearly appropriate.
  3. Make reasonable efforts to ensure that the results of industrial hygiene assessments are communicated to exposed populations.