

***On-Line Basic Infection Control for Infection Control Professionals
Medical Sciences 660: On-Line Basic Infection Control
University of Calgary
Fall and Winter 2009-10***

What is the purpose of this course?

The purpose of these courses are to provide novice Infection Control Professionals (ICPs) with the basic knowledge, tools and strategies needed to do Infection Control in a board range of health care environments from health care institutions to the community. The purpose of this entry to practice course is (1) to identify and describe the scope of infection prevention and control problems and issues for novice ICPs and (2) to examine and integrate their current expertise with the basic knowledge, tools and strategies needed to examine problems and develop practical solutions in Infection Control.

What does the course cover?

The course consists of approximately 100 hours offered with an Introduction Module, 4 – 2 part course-based modules and 1 practicum module. These are:

- Introduction Module - To introduce yourself to the class, to learn how to navigate in Blackboard and to become familiar with the course expectations.
- Module 1 - What is infection control, how it is done and how to teach infection control to others.
- Module 2 - Common micro-organisms that are a problem in healthcare-acquired infections and relevant communicable diseases and the type of infections they commonly cause.
- Module 3 - Basic concepts of epidemiology which is relevant to the transmission of infections and describe and to apply the basic principles of surveillance and outbreak management.
- Module 4 - Basic Occupational Health and environmental problems issues that are relevant to Infection Control and identify potential solutions.
- Module 5 (Practicum) – To introduce the student to the realities of practicing and applying the principles infection control in a healthcare environment.

This course is web-based and includes readings, exercises, online tutorials and web-based discussion with colleagues and facilitators. Online individual and group discussions and the examination after each module focus on the application of course material in the module.

You will receive a grade and university credit at the completion of the course. You will also receive a certificate from CHICA-Canada that indicates you have successfully completed the course.

How computer literate do I need to be?

As the readings and discussion will be web-based, you will need internet access, preferably high speed access. You do not have to be a computer expert but a basic level of comfort with your computer is necessary. You will need to know how to move around the course web page and type in your comments and questions (instructions will be provided). As part of the course you will learn how to access journals online. Instructions on the basic use of Blackboard (the application the course reside on) will be provided to you.

What's involved in participating taking this course?

You will be asked to do the readings and exercises, to interact with the others on a regular basis, to complete the assignments and exams, and to provide feedback on the course content and process. It is expected that you will be participate in both individual and group discussion.

The time commitment for the course is approximately 10 -15 hours per week over 2 terms which is the equivalent of about a 26 week period. The course will start in September and run until the April. You can schedule your learning activities at your convenience in any week but will need to keep up with your classmates and the

course schedule in order to benefit from the discussions. As these courses are work-related, you should see if you can negotiate with your employer to devote some work time to this learning process.

The course is equivalent to 2 half-credit University of Calgary courses. You are required to register as a special (Open Studies) student and to pay course fees to the University of Calgary. The total fee for the course is approximately \$ 2100 CAN for Canadians and \$3800 CAN for international students. The fee break down is:

University (University of Calgary) course fees are approximately: \$1320.00 (for Canadian students)
\$3000.00 (for International students**)
(There always seems to be some additional fees that are added by the Registrars' Office that are not listed)
University (University of Calgary) registration fee: \$ 35.00
Course fee to CHICA-Canada (for course Teaching Assistant) \$ 725.00

****International Students** includes students who are not Canadian citizens or permanent residents of Canada.

- The fee to the University of Calgary covers the cost of 1 full credit course plus any additional fees required by the Registrars' Office and the initial registration fee of \$35.
- To register for the course, the \$35 registration fee and a \$200 deposit must be paid when the registration form is submitted. Registered students can access their fee statement through the InfoNet for Students link on myUofC.
- The \$725.00 course fee to CHICA-Canada covers overhead costs to CHICA-Canada for a course assistant and for current and future course development.

Students are also required to purchase copies of the following 2 textbooks:

- Ebbing Lautenbach, Keith Woeltje, Editors. *Practical Handbook for Healthcare Epidemiologists, Second Edition*. Thorofare, NJ, SLACK Incorporated, 2004. (Out of Print but received permission to make copies) Copies available through the University of Calgary Medical Bookstore **Cost 30.00 + GST**
- Richard Goering, Hazel Dockrell, Ivan Roitt, Mark Zuckerman, Derek Wakelin. *Mims' Medical Microbiology, 4th Edition*. Edinburgh, Mosby Elsevier Limited, 2008 **Cost about \$ 90.00**
- Course materials will be available in Adobe Acrobat (.pdf) format for you to download and print for the course and for future use.

Both books can be purchased through the University of Calgary Medical Bookstore and will be shipped to you. Shipping costs are usually \$5-\$6. Call toll-free 1-877-777-4738. .

What is the time line?

Course weeks start on Wednesday and go to the following Tuesday. The course-based material will be delivered as follows:

- Week 1 – Introduction in the Week of September 16.
- Modules 1 and 2 will run from September 23 to December 15, 2009 with 2 examinations and scheduled time for working on group projects.
- Modules 3 and 4 will run from January 13 to April 7, 2010 with 2 examinations and scheduled time for working on group projects.
- The course practicum which consists of 12 hours that can be done anytime over the course and must be completed by April 16, 2010.
- On-line discussion on topics of interest will be ongoing throughout the course.
- The final paper for the course must be submitted by April 16, 2010.

A detailed course outline will be available in July – Scroll down to MDSC 660 and click on the link at <http://www.ucalgary.ca/communityhealthsciences/current/gradcourses/epi>

Who can take this course?

The courses are open to novice ICPs from across Canada who has been practicing in Canada for less than 1 year or they have been working part time (≤ 0.5 FTE) for no more than 2 years.

The maximum number of participants will be 25—registration is on a first-come, first-served basis. An undergraduate degree is not required to take the course; however, permission from the instructor is required.

What will I/my agency get out of my participation?

These courses will provide you with the basic knowledge, tools and strategies needed to do Infection Control in a board range of health care environments from health care institutions to the community. You will have the opportunity for networking and learning about resources to help you with infection control in the future. Thus, both you as an individual and your agency will benefit from the course.

What are the minimum computer requirements for these courses?

You will need:

- Internet access (preferably high speed)
- Windows operating system (Windows 98 or later)
- Java enabled browser (Internet explorer 5.5 or later)
- Adobe Acrobat Reader 6 (or later)
- Microsoft Word and Powerpoint or equivalent

If you are unsure as to your computer's software or are missing some of the software, contact your IT department at work.

Information for the On-line Basic Infection Control course you need to know:

- A detailed course outline for Medical Sciences 660 can be found in Appendix A.

Please read the course outline carefully before you decide to register for it. This course requires a significant time commitment over an 8 month period. Please be sure that you are able to make that commitment.

- The entire course must be completed to obtain University credit and to receive a CHICA-Canada Certificate.
- Registration will be on a first come first serve basis – total number of registrants is 25 students.
- When registering, you must all of the items below:
 - Include payment of registration fee (\$35) and deposit (\$200)
 - Include a copy of your transcripts (these do not have to be official copies but they must have your name and the university's logo and name)
 - Complete forms in Appendix B – Forms for Course Registration
 - Complete the attached registration form
 - Complete the contact information sheet

Fax all these documents to: Dr. Betty Ann Henderson at 403-944-2484

- Registration for the courses will be closed August 14, 2009. **If there is room in the course, any applications received after August 14 will not be processed until after August 31, 2009 which could result in delayed access to the course materials.**
- Fees must be paid as follows:
 - **Payment to the University of Calgary – Registrar's Office**
 - Registration Fee \$ 35 + Deposit \$200 at registration
 - Fees for Medical Sciences 660 – Deadline September 21, 2009
 - **Payment to CHICA-Canada to CHICA-Canada Membership Office**
 - Overhead costs - \$ 725 – Deadline October 1, 2009

For more information about the course, contact:

Dr. Betty Ann Henderson

Telephone: 403-944-4373

Fax: 403-944-2484

Email: ehenders@ucalgary.ca or Elizabeth.Henderson@albertahealthservices.ca

APPENDIX A – Detailed Course Outline

TRAINING MODULES	PART	TOPIC	TIME REQUIRED	METHOD OF TEACHING
INTRODUCTION	INTRO WEEK 1 Sept 16 -- 22	Introduction to course <ul style="list-style-type: none"> • Understand the format for the course and course expectations • Comfortably navigate the web site • Know the other participants • Read and post messages on the discussion board • Find the readings, and distinguish between required readings and those recommended for further information/interest • Be able to attach and download files (to/from course web site and email) and systematically save and organize files • Identify the various roles of infection control 	<ul style="list-style-type: none"> • 4 hrs 	<ul style="list-style-type: none"> •

TRAINING MODULES	PART	TOPIC	TIME REQUIRED	METHOD OF TEACHING
MODULE 1 What is Infection Control, How is it done and Teaching others to do it? (20 hours)	1 WEEK 2 & 3 Sept 23 – Oct 6	Introduction to Infection Prevention and Control Administration and Teaching Others <ul style="list-style-type: none"> • Mandate of Infection Prevention and Control • Role of Infection Control Professionals • Accessing resources • Roles and responsibilities of Infection Control Committee and Infection Control Program • Creating, adopting and updating policies and procedures • Principles of team building • Ethical Practice in Infection Control Teaching Others <ul style="list-style-type: none"> • Adult learning • Giving presentations • Influencing staff and administrators 	<ul style="list-style-type: none"> • 12 hrs 	<ul style="list-style-type: none"> • Instruction • Developing a presentation
	2 WEEK 4 & 5 Oct 7 – 20	Infectious Diseases Epidemiology <ul style="list-style-type: none"> • Define epidemiology and relate it to IP&C • Describe the chain of infection and host-agent-environment interaction. • Describe the modes of transmission Infection Control Precautions <ul style="list-style-type: none"> • Standard/routine precautions, specific precautions • Barriers (Personal protective equipment – PPE) • Hand Hygiene 	<ul style="list-style-type: none"> • 8 hrs 	<ul style="list-style-type: none"> • Instruction
WEEK 6 October 21 - 27	EXAMINATION FOR MODULE 1			
WEEK 7 October 28 – 3	GROUP PROJECTS			

TRAINING MODULES	PART	TOPIC	TIME REQUIRED	METHOD OF TEACHING
MODULE 2 Basic Microbiology and Infections in Patients (20 hours)	3 WEEK 7, 8 & 9 Nov 4 – Nov 24	Basic Microbiology <ul style="list-style-type: none"> • Distinction between types of micro-organisms • Interpretation of Culture and Sensitivity results and gram stain • Collecting specimens • The role of the lab in Infection Prevention and Control • Correlate organisms with disease 	<ul style="list-style-type: none"> • 8 hrs 	<ul style="list-style-type: none"> • Instruction • Reading a lab report
	4 WEEK 10 & 11 Nov 25 – Dec 8	Specific Infections of Interest <ul style="list-style-type: none"> • Common infections in all three settings (Antibiotic-resistant Organisms, Surgical Site Infections, Bloodstream Infections, Urinary and Respiratory Tract Infections and Enteric infections) • Notifiable diseases/ communicable diseases • Health Canada and Centers for Disease Prevention and Control (CDC) guidelines • Role of the provincial and municipal Health Departments 	<ul style="list-style-type: none"> • 12 hrs 	<ul style="list-style-type: none"> • Instruction • Case Studies in groups of 3-4
WEEK 12 December 8 – December 15	EXAMINATION FOR MODULE 2			
	GROUP PROJECTS – No Group Projects for Module 2			
CHRISTMAS BREAK - December 16, 2009 – January 12, 2010				

TRAINING MODULES	PART	TOPIC	TIME REQUIRED	METHOD OF TEACHING
MODULE 3 Principles of Infection Control Epidemiology (24 hours)	5 Week 13 & 14 Jan 13 - 26	Basic Concepts of Epidemiology and Outbreak Management <ul style="list-style-type: none"> • Definitions of basic terms • Interpretation of stats Outbreak Management <ul style="list-style-type: none"> • Identify an outbreak • Mounting an investigation • Reporting results and making recommendations 	• 10 hrs	<ul style="list-style-type: none"> • Instruction • Case Studies in groups of 3-4
	6 Week 15 & 16 Jan 27 – Feb 9	Surveillance <ul style="list-style-type: none"> • Definitions and purpose • Objective vs. total • Data collection and management • Basic analysis and reporting • Types of surveillance • Process vs. outcome surveillance 	• 12 hrs	<ul style="list-style-type: none"> • Instruction • Development of a final surveillance report
WEEK 17 February 10 – 16	EXAMINATION FOR MODULE 3			
WEEK 18 February 17 – 23	GROUP PROJECTS			

TRAINING MODULES	PART	TOPIC	TIME REQUIRED	METHOD OF TEACHING
MODULE 4 Infection Control and Occupational Health and the Environment (16 hours)	7 Week 19 & 20 Feb 24 – Mar 9	Occupational Health & Infection Prevention and Control <ul style="list-style-type: none"> • Health care worker exposures to communicable diseases • Sharps/Blood Exposures • Collaboration with Infection Prevention and Control 	• 4 hrs	• Instruction
	8 Week 21 & 22 Mar 10 – 23	The Environment <ul style="list-style-type: none"> • Sterilization and disinfection • Reuse issues • Environmental cleaning • Air handling • Construction and renovations • Canadian Standards Association/Health Canada guidelines (Heating Ventilation Air Conditioning (HVAC) Systems and construction in health care facilities) 	• 12 hrs	• Instruction
WEEK 23 March 24 – 30	EXAMINATION FOR MODULE 4			
WEEK 24 March 31 – April 6	GROUP PROJECTS			

TRAINING MODULES	PART	TOPIC	TIME REQUIRED	METHOD OF TEACHING
MODULE 5 Practicum (12 hours)		Practicum Component Must be completed and have documentation submitted by April 16, 2010.	<ul style="list-style-type: none"> • 8 hrs clinical • 4 hrs lab/other 	<ul style="list-style-type: none"> • Clinical time • Other options available, depending on setting (ex: lab time, ICC meeting)
COURSE TERM PAPER		Must be completed and submitted by April 16, 2010.		

APPENDIX B – Forms for Course Registration

Contact Information Sheet

The following information will be used for the instructors to contact you should the need arise during the courses, to organize the class for optimal learning and to send out course materials by mail. This information will not be made available to anyone else.

PLEASE PRINT.

Name: _____

Mailing Address: _____

City _____ Province: _____ Postal Code: _____

Telephone contact: (work) (____) _____

(home) (____) _____

E-mail address: _____

How long have you been doing Infection Control? _____

Where do you work: Acute Care _____ approximate # of Beds _____

Long Term Care _____ approximate # of Beds _____

Home Care _____ approximate # of Clients _____

Public Health _____

Combination of the above _____ (please mark of what combination)

OPEN STUDIES STUDENT APPLICATION AND REGISTRATION

An open studies student is a student who is permitted to register in credit courses, but who is not admitted to a program leading to a degree or diploma. **No assurance is given that courses taken as an open studies student will be credited if the student subsequently seeks admission to a degree or diploma program.**

Students who are currently under suspension (required to withdraw from a faculty or from another post-secondary institution within the last 12 months) are not permitted to register.

To be eligible for registration under this category students must be holders of an approved Bachelor's degree from an "accredited" institution with a minimum of three years of recognized university level course work **or** 18 years of age or older **or** holders of the Alberta High School diploma or equivalent.

Non-degree students (Persons who do not possess a university degree but are 18 years of age or older or holders of the Alberta High School diploma or equivalent.)

Open studies students who are not degree holders are limited to registering in a maximum of **two** half courses per session to a total maximum of ten half courses (including withdrawals). Students who wish to complete more than ten half courses must apply for admission to a specific faculty by the deadlines noted in the University's Academic Schedule and meet all of the requirements for admission.

Open studies non-degree students are allowed only one D or D+ grade. Students who obtain an F grade or a second D or D+ grade will be refused further registration under this category.

Non-degree students normally will not be permitted to register in undergraduate courses with limited enrolments unless there is space available at the start of classes. Students will be required to obtain Faculty/Departmental approval. Non-degree students are not permitted to register in 700-level or higher courses.

Degree holders

Holders of an approved degree are not restricted to the maximum number of courses stated above.

English Language Proficiency:

All applicants must demonstrate English language proficiency for purposes of admission.

Information about ways of meeting this requirement can be found at:

http://www.ucalgary.ca/pubs/calendar/2006/how/How_BR.htm

PROCEDURES

This form is used for both application and registration. Upon receipt of the completed form and the items noted below, your eligibility as an open studies student will be determined.

1. Fill in this form carefully and completely. Please print clearly.
2. Complete the credit card information or enclose a cheque or money order for the **\$100.00** registration deposit (or full fees). If you have not previously attended this University, you must also enclose a non-refundable **\$35.00** application fee. Fee information is available in the University Calendar or at the Office of the Registrar upon request.
3. **Required Transcripts:**
 - (a) If you do not possess a University degree you must submit high school transcripts and, if applicable, transcripts from all post-secondary institutions attended (colleges, universities, schools of nursing, technical institutes).
 - (b) Holders of a University degree must enclose University transcripts showing the degree and the date awarded. High school transcripts are required only if registering in courses with high school prerequisites.If your transcripts are already on file at the Office of the Registrar, you do not have to submit them.
4. Obtain approval if required. Students registering in senior level courses (numbered '300' or higher) may be required to obtain the approval of the Faculty/Department offering the course before submitting this form to the Office of the Registrar. Inquiries may be directed to the Office of the Registrar.
5. **Deadline:** The deadline to submit the completed application form with all enclosures to the Office of the Registrar is the last business day prior to the beginning of lectures for the session to which applied. See the University's Academic Schedule (www.ucalgary.ca/pubs/calendar).

No form will be accepted unless completed in full and accompanied by all required items. Open studies students may register using Infonet. Contact the Office of the Registrar for further information.

