

Welcome to PATH 427: Basic Principles of Infection Control

We are pleased that you are interested in Infection Control and are willing to try a new approach to learning. You will encounter three or four new learning modalities in this course, i.e., on-line, group, problem-based & self-directed learning.

Your learning will be directed by narratives that describe infection control scenarios, accompanied by a series of related questions. Through guiding questions, and your pursuit of information regarding the questions, you will learn the subject matter of the course. And you will not be learning alone. You are working in a team throughout the course. We have found that students' learning is enhanced through the team approach used in problem-based courses.

Taking an online course will be the first new learning modality for you. You don't have to be a computer wizard to take this course - rest assured that neither of us is very computer literate.

One thing that we do to help you is to form the learning groups (for more about this see "Getting Started" below) with a mix of computer-shy students with computer friendly/savvy students. In this way, each group can facilitate its own teaching and learning with regard to the computer aspects of the course.

We hope you enjoy the course and that it helps you to meet your personal and professional objectives to obtain further knowledge about Infection Control.

To help you to become familiar with the course website, and to get to know each other, we ask that you do two things in the first few days of the course.

1. Please post something about yourself on the course bio-page. (Click on Bio-Page on the left side navigation bar) By introducing yourself on the bio-page you give other students a chance to know something about you.

Include on the bio-page some information about your level of comfort with using a computer, i.e., do you consider yourself to be computer literate? Have you used WebCt before? Also, include some information about your background in infection control and whether you have taken other courses in microbiology.

If you are up to it, posting a photo of yourself, your pet or your children also helps to 'break the ice' and begin the building of a sense of 'community' within the course.

2. Please read the 'Guide to the Course Website' and click on all of the buttons along the navigation bar so that you familiarize yourself with WebCT and its tools.



Introduction

Getting Started

First Steps

Reading all of the sections of this introduction, plus trying out the course tools by posting something about yourself to the bio-page, are good ways to become familiar with the course environment which is the website itself.

The Cases

As the weeks go by each case will be made available to you according to the schedule (click on "Schedule" on left side navigation bar).

With each case, you are given an infection control scenario, accompanied by a series of questions and objectives. References to relevant areas of your textbook or web-based sites will be provided to help you acquire the knowledge and understanding to answer these questions. This information will be released on Sunday morning at 0900. You have until the next Sunday at 1800 to discuss the answers to these questions within your group (with your Group Forum), before uploading them to the Case Forum in the "Discussion" area.

To help divide the responsibility of uploading the answers on time, we will designate particular group members to be in charge of each of the questions at the beginning of each case. Their responsibility is

(i) to start the discussion; and

(ii) to upload the result of the discussion to the Case Forum.

However, all the group members should be contributing to answering the questions.

Once the answers are all posted onto the Case Forum, we will comment on the answers and particularly on any differing points raised. At that point, the class members get involved again in a general discussion of any points of interest, misunderstanding or discrepancies that were raised. You do not have to answer as a group at this point. This is a very important part of the case - you need to read all of the answers in the Case Forum and follow the discussion thread through.

The discussion for the case will come to a close on the Thursday. At this point we would encourage you to ensure that all the objectives are met and you understand the week's content. The questions on the final exam will be based on the case objectives.

Problem-Based Learning

In this course you are directed in your learning through narratives which describe infection control scenarios, accompanied by a series of related questions. By answering these questions you will acquire knowledge and understanding pertinent to that area of infection control. You will not be answering these questions on your own but rather will be discussing them in small groups followed, after a certain period of time, by a sharing of the groups' answers. You are also directed to specific sections in your textbook and to other resources mainly based on the web.

One of the potential pitfalls in a problem based learning course is that there appear to be no boundaries to the amount of knowledge you can acquire on a subject. To save yourself from falling into this trap, it is extremely important that you and your group set boundaries to the breadth of knowledge needed to answer the questions that accompany each of the cases. The best advice that we can give you is to focus clearly on what the question is asking. If you think you are straying from the question then reread the question and ask yourself if what you are discussing is central to the question you are trying to answer, or is it peripheral. Don't worry, we will let you know by our responses to the posted answers, and by private response to you if necessary, if you are not reaching the required depth in your understanding of the subject matter.

The group Learning Experience

A learning modality that may be new for you is learning in groups. The class will be partitioned into learning groups matched in term of strengths and weaknesses in the areas of

(i) computer usage; and,

(ii) prior knowledge/experience in infection control.

In this way, those who are more knowledgeable in one area can assist in the learning of those who are less knowledgeable. Each group will have its own private Forum on the bulletin board wherein all of your group discussion(s) take place. (Note: the course instructors will have access to all Forums). Thirty percent of the final mark for this course will come from a continuous assessment of your contribution to your own learning and to that of your classmates. This will be assessed mainly on your contribution to the learning within your group.

Self-Directed Learning

Although you are somewhat directed in your learning in this course by virtue of the fact that there is a timetable to how the cases unfold; and you are learning within groups rather than on your own, nonetheless, you will find it easier to participate meaningfully in this course if you manage your time wisely. For guidelines and information on time management and other organisational skills, please consult the student handbook which you received from the Distance Education and Technology office when you registered for this course. The handbook can also be accessed on the Web at http://det.cstudies.ubc.ca (Note: this link will open in a new window. Close the window to return to this page.)

Communication: student to student; student to instructors; instructors to student Much of your communication will be within your group and you have a specially designated Forum on the Bulletin Board where that takes place. However, from time to time there may be some points of information that you wish to share with the whole class. To do this, click on "Discussion" and then click on "Class Forum" and place your message there. WebCt also includes a "Chat" feature if you want to simply chat with another student in your group or in the class in real time. Arranging the chat times are your responsibility.

When we, the instructors, want to send a message to the whole class we will either use the e-mail function within the course to send each of you the same message or will simply post it in "Discussion" under the "Announcement" button. If we wish to send a private message to one of you, we will simply send you a private e-mail within the course (when you log on the program will let you know that you have received mail, nobody else will get this message.) Similarly, if you need to talk privately to us you simply send us a Private e-mail through the course. The instructions for how to do this are laid out in the "Guide to the Course Website." We would like to warn you AWAY FROM posting messages in the Forum/Bulletin Board labelled Main as this can get impossibly overcrowded.



Course Schedule (2007)

Item	Date Available	Due Date/Wrap Up
Introduction to the Course	January 8	January 14
Assignment: Post Bio-pages		January 14
Case 1 Understanding the Infection Control Structure	January 14	January 21
Post Case Answers (Please work individually on the case this week and post your answers as soon as you have had a chance to do the reading since there is only one week for this case.)		January 21
Case 2 Infection Control Precautions	January 21	February 2
Small Group Discussion	January 22	January 28
Post Case Answers		January 28- 29
Large class discussion with Instructors	January 23	February 2
Case 3 Nosocomial Infections & Their Surveillance/Outbreak Investigation	February 2	February 16
Small Group Discussion	February 4	February 11
Post Case Answers		February 11- 12
Large class discussion with Instructors	February 12	February 16
Case 4 Antimicrobial Resistance & Infection Control	February 16	March 2

Small Group Discussion	February 18	February 25
Post Case Answers		February 25- 26
Large class discussion with Instructors	February 26	March 2
Case 5 Blood-Borne Infections	March 2	March 16
Small Group Discussion	March 4	March 11
Post Case Answers		March 11-12
Large class discussion with Instructors	March 12	March 16
Mid-Term Break/Exam Online	March 17	March 25
Case 6 Infection Control in Institutional Construction & Design	March 23	April 6
Small Group Discussion	March 25	April 1
Post Case Answers		April 1-2
Large class discussion with Instructors	April 2	April 6
Case 7 Paediatric Issues in Infection Control	April 6	April 20
Small Group Discussion	April 8	April 15
		•
Post Case Answers		April 15-16
Post Case Answers Large class discussion with Instructors	April 16	April 15-16 April 20
Post Case Answers Large class discussion with Instructors Case 8 Infection Control & Long-Term Care	April 16 April 20	April 15-16 April 20 May 4
Post Case Answers Large class discussion with Instructors Case 8 Infection Control & Long-Term Care Small Group Discussion	April 16 April 20 April 22	April 15-16 April 20 May 4 April 29
Post Case Answers Large class discussion with Instructors Case 8 Infection Control & Long-Term Care Small Group Discussion Post Case Answers	April 16 April 20 April 22	April 15-16 April 20 May 4 April 29 April 29-30
Post Case Answers Large class discussion with Instructors Case 8 Infection Control & Long-Term Care Small Group Discussion Post Case Answers Large class discussion with Instructors	April 16 April 20 April 22 April 30	April 15-16 April 20 May 4 April 29 April 29-30 May 4
Post Case Answers Large class discussion with Instructors Case 8 Infection Control & Long-Term Care Small Group Discussion Post Case Answers Large class discussion with Instructors Case 9 Community & Ambulatory Care Issues in Infection Control	April 16 April 20 April 22 April 30 May 4	April 15-16 April 20 May 4 April 29 April 29-30 May 4 May 18
Post Case AnswersLarge class discussion with InstructorsCase 8 Infection Control & Long-Term CareSmall Group DiscussionPost Case AnswersLarge class discussion with InstructorsCase 9 Community & Ambulatory Care Issues in Infection ControlSmall Group Discussion	April 16 April 20 April 22 April 30 May 4 May 6	April 15-16 April 20 May 4 April 29 April 29-30 May 4 May 18 May 13
Post Case AnswersLarge class discussion with InstructorsCase 8 Infection Control & Long-Term CareSmall Group DiscussionPost Case AnswersLarge class discussion with InstructorsCase 9 Community & Ambulatory Care Issues in Infection ControlSmall Group DiscussionPost Case Answers	April 16 April 20 April 22 April 30 May 4 May 6	April 15-16 April 20 May 4 April 29 April 29-30 May 4 May 18 May 13 May 13-14
Post Case AnswersLarge class discussion with InstructorsCase 8 Infection Control & Long-Term CareSmall Group DiscussionPost Case AnswersLarge class discussion with InstructorsCase 9 Community & Ambulatory Care Issues in Infection ControlSmall Group DiscussionPost Case AnswersLarge class discussion with InstructorsCase 9 Community & Ambulatory Care Issues in Infection ControlSmall Group DiscussionPost Case AnswersLarge class discussion with Instructors	April 16 April 20 April 22 April 30 May 4 May 6 May 14	April 15-16 April 20 May 4 April 29 April 29-30 May 4 May 18 May 13-14 May 18
Post Case Answers Large class discussion with Instructors Case 8 Infection Control & Long-Term Care Small Group Discussion Post Case Answers Large class discussion with Instructors Case 9 Community & Ambulatory Care Issues in Infection Control Small Group Discussion Post Case Answers Large class discussion with Instructors Case 9 Community & Ambulatory Care Issues in Infection Control Small Group Discussion Post Case Answers Large class discussion with Instructors Study week	April 16 April 20 April 22 April 30 May 4 May 6 May 14 May 18	April 15-16 April 20 May 4 April 29 April 29-30 May 4 May 13 May 13 May 13-14 May 18 May 25



Your performance and learning in this course will be evaluated in 3 ways.

- Participation: 30% of the mark for this course will be assigned based on your contribution to the interactive group learning process i.e. based on your involvement in your groups' discussions. This will be evaluated using the following criteria: (a) the extent to which you become involved in the discussion of the questions; (b) the validity of the points that you raise in these discussions i.e. are you applying your learning when talking with your group; and, (c) delivering on your assigned responsibility for individual questions in each of the cases. As mentioned earlier we, the instructors, have access to all of the group forums and chat rooms which we will access to allow us to generate the mark for the continuous assessment part of the course. Please note that we are not assessing whether you "get it right the first time". We are looking for participation and effort in answering the questions. Another important point many times there is no "correct" answer to an infection control problem in these situations we are more concerned with the reasoning that went on in the group.
- 2. Midterm examination: 30% of the mark for this course will be allotted to a midterm exam which will be delivered over the computer. (the date to be finalised). This exam will be an open book exam and you will be given sufficient time to access it during a 48 hour period. It will mirror the final exam in the type of questions asked and the learning that it is examining i.e. it will test your ability to synthesise and integrate what you have been learning over the previous few weeks.. We will attempt to give extra help to those who do not perform well in this exam so that they may improve their learning during the second half of the course.
- 3. Final examination: The final exam will be taken in the presence of a proctor. It will count for 40% of the mark for this course and will examine all of the course material (i.e. not just the material that you have learned in the second half of term).



As this is the first case, we have allowed time for the following activities during the next ONE week period.

- 1. Read the Introduction. Look at all of the sections, especially the "Student Guide to Online Learning." Practise how to make tables, enter into your discussion group, and post your Student Biography in the "Bio Pages" section.
- 2. Read the Instructors' Comments. It is critical that you understand the approach of the course, the course logistics, how we will communicate, and how you will be evaluated.
- 3. Work on the Case independently during week 1.

Case One

You are the infection control practitioner in a new, 400 bed community hospital with a six-bed adult and a six-bed paediatric intensive care unit. You work through the Pathology Department under the direction of the Medical Microbiologist. You have been asked to assist in establishing an Infection Control program and deciding its priorities.

Case One Questions:

- 1. What will be the structure of your infection control program? Who should be a part of the Infection Control Committee and to whom should the committee report? Who do you think should chair the committee? Justify your answers.
- 2. What differences (if any) exist between an Infection Control Unit and an Infection Control Committee?
- 3. List key activities of your infection control program. Would these activities change if you were based in a long-term care institution?
- 4. Using a table, outline your idea of a typical week for an infection control practitioner (you do not have to account for every hour of the day, but rather blocks of time or percentage of time dedicated to activities). Briefly discuss the rationale behind your time allotments.
- 5. Would the percentage of time spent during your work week change if you were in a long-term care institution. Why or why not?

Case One Reading:

This case's reading consists of:

- Chapter 4 of Hospital Infections, Bennett and Brachman or
- Chapter 26 "The Infection Control Committee" and Chapter 27 "Developing Infection Control Policies and Guidelines" in Lautenbach, *Practical Handbook for Health Care Epidemiologists*, 2nd ed.
- Click on <u>Practice Guidance</u>, then Standards to find the professional and practice standard document. Then look under Practice Guidance, then Reports for the documents on the requirements of infrastructure.