



INFC 215 - Infection Prevention and Control

Course Description:

The chain of infection and methods of prevention and control of microorganisms, including blood borne viruses such as hepatitis and human immunodeficiency virus (HIV) will be reviewed. Immunization, routine practice, additional isolation precautions, sterilization and disinfection, safety and Workplace Hazardous Materials Information System (WHMIS) are also covered.

1.5 Credits

Time Guidelines:

The standard instructional time for the day-time course offering is 22 hours. Continuing Education and Distance Education hours will vary.

Effective Year

2020/2021

Technical Requirements

This course is offered during day classes or online. To register online please click below. To join our day classes, call (403) 284-SAIT.

Course Assessment:

Quizzes	30%
Exams	70%
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Total:	100%

Other Course Information:

School of Health and Public Safety Attendance Guideline

The School of Health and Public Safety (HPS) has expectations, consequences and processes for excused absences approval and review related to attendance. The entire Attendance Guideline may be found on the HPS pre-orientation resources website at: sait.ca/hpsorientation. This document is located under the General Resources section found on your Program page. **Students are expected to review the entire Attendance Guideline.** In particular, students are asked to take note of the attendance expectations shown below.

Attendance Expectations

Students in the School of Health and Public Safety are expected to achieve 100% attendance for scheduled classes and to participate in any learning activities on a regular basis. There is a positive correlation between attendance, participation and grades. Failure to keep up with course work or repetitive and cumulative absences will result in a formal review of the student's progress.

A successful, well-rounded and job-ready Allied Health graduate must demonstrate the necessary knowledge, skills and abilities while attending both SAIT and workplace learning experiences.

The School of Health and Public Safety (HPS) expects students to:

- Attend all gradable components up to, and including, the last day of the final exam week.
- Arrive early and be prepared for all gradable components.
- Act as a responsible leader by modelling professional attendance behaviour and being accountable for personal actions. This is demonstrated by communicating and documenting personal disruptions to instructors and or preceptors, if applicable.
- Communicate and document any current and/or upcoming personal disruptions as early as possible to his/her instructor, preceptors and/or Academic Chair.
- Contact instructor(s) on the first day of return to the program after an absence to make arrangements for missed time, if allowed.
- Schedule personal appointments outside of program schedules when possible.
- Complete the SAIT Physician Statement form when requesting a deferred gradable course component and submit the form to the Academic Chair.
- Discuss and ensure any changes to a course or workplace schedule are approved by the SAIT instructor and/or Academic Chair.
- Schedule a meeting with the Academic Chair to discuss any extended illness or medical leaves, accessibility requirements, or accumulated absences or chronic lateness.

SAIT Policies and Procedures:

For information on the SAIT Grading Scale, please visit policy AC 3.1.1 Grading Progression Procedure: [http://www.sait.ca/Documents/About SAIT/Administration/Policies and Procedures/AC.3.1.1 Grading and Progression Procedure.pdf](http://www.sait.ca/Documents/About%20SAIT/Administration/Policies%20and%20Procedures/AC.3.1.1%20Grading%20and%20Progression%20Procedure.pdf)

For information on SAIT Academic Policies, please visit: www.sait.ca/about-sait/administration/policies-and-procedures/academic-student

Course Learning Outcome(s):

1. Differentiate the major groups of microorganisms including their roles in disease.

Objectives:

- 1.1 Differentiate four groups of microorganisms.
- 1.2 Distinguish different types of bacteria in terms of their shape and Gram stain.
- 1.3 Explain the purpose of the Gram reaction.
- 1.4 Describe the importance of bacterial endospores.
- 1.5 Describe the reproduction process of bacteria.
- 1.6 Explain the four growth phases of bacteria and their relation to infection.
- 1.7 Describe the characteristics of lipid and non-lipid viruses.
- 1.8 Explain the multiplication process, possible effects on host cells and the control of viruses.

2. Describe the relationship between microbes and hosts in the infection processes.

Objectives:

- 2.1 Explain the host-microbial relationship in terms of normal flora and non-normal flora.
- 2.2 Describe the chain of infection.
- 2.3 Relate the signs and symptoms of infection using appropriate terms.
- 2.4 Describe the role of nosocomial infections in health care settings.
- 2.5 Explain the impact and control of antibiotic-resistant organisms (AROs) in health care.
- 2.6 Explain the role of infection prevention and control professionals in health care.

3. Describe the role of immunization in prevention and control of infection in health care settings.

Objectives:

- 3.1 Describe the immune response in healthy individuals.
- 3.2 Describe commonly used products for immunization.
- 3.3 Explain rubella, hepatitis B and chickenpox immunization.
- 3.4 Explain the purpose of testing for tuberculosis in health care workers.

4. Describe the transmission of blood borne viruses (BBVs) and other emerging infections.

Objectives:

- 4.1 Describe the risks to health care workers when working with infected patients.
- 4.2 Discuss hepatitis A, B and C.
- 4.3 Discuss human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS).
- 4.4 Explain the role of health care workers in preventing the transmission of bloodborne pathogens (BBPs).
- 4.5 Discuss the transmission of emerging infections.

5. Apply national, provincial and local guidelines to prevent transmission of microorganisms in health care settings.

Objectives:

- 5.1 Describe the purpose of routine practice.
- 5.2 Follow guidelines and procedures for hand washing and the donning and doffing of personal protective equipment (PPE).
- 5.3 Follow procedures for handling and disposing of needles and other sharps, spill cleanup and other biohazardous waste.
- 5.4 Follow the protocol required after a significant exposure to blood and body fluids.
- 5.5 Describe the purpose of additional precautions.

6. Differentiate sterilization, disinfection, and aseptic techniques.

Objectives:

- 6.1 Outline how sterilization, disinfection, antisepsis, sanitation, and cleaning are achieved.
- 6.2 Classify medical items using Spaulding's Classification System.
- 6.3 Distinguish between the least and most resistant microorganisms.

6.4 Describe the three levels of disinfection.

6.5 Explain the use of various modes of chemical and mechanical disinfection.

6.6 Describe aseptic techniques in health care settings.

7. Explain workplace rules and regulations outlined by occupational health and safety legislation.

Objectives:

7.1 Identify the provincial act related to occupational health and safety.

7.2 Outline the general responsibilities of the employer and employee for safety in health care settings including emergency response codes.

7.3 Describe the legislation, basic principles and procedures for Workplace Hazardous Materials Information System (WHMIS).

7.4 Name the regulations governing the transportation of dangerous goods.

7.5 Describe waste handling in health care facilities.

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