

DEPARTMENT of SCIENCE

COURSE OUTLINE – WINTER 2016

MI1330 (YA1/YA2): Medical Microbiology for Health Care Professionals – 3 (3-0-0) 45 Hours for 15 Weeks

| INSTRUCTOR: | Dr. Sean Irwin, Ph.D. | PHONE: | (780) 539-2860 |
|--------------------|-----------------------|---------|-------------------|
| OFFICE: | J221 | E-MAIL: | sirwin@gprc.ab.ca |

OFFICE HOURS: Tues. and Thurs. 10 - 11:20 am; Wed. 1 - 2:20 pm

CALENDAR DESCRIPTION:

Introductory course in medical microbiology designed for students enrolled in health care related programs. This course begins with basic information on microorganisms (bacteria, viruses, fungi, parasites and prions), the immune system, infection control, transmission of infection, epidemiology, antimicrobials, disinfection and sterilization. The later part of the course concentrates on infectious diseases caused by pathogenic microorganisms.

Notes: Restricted to Nursing students.

PREREQUISITE(S)/COREQUISITE:

REQUIRED TEXT/RESOURCE MATERIALS:

Totora, G.J. et al., <u>Microbiology: An Introduction</u> (11thed.), Pearson Education, Inc., San Francisco, CA, 2010.

DELIVERY MODE(S): Lectures: MI1330 YA1/YA2 Monday 11:30 – 12:50 pm, J201 Friday 10:00 – 11:20 am, J201

COURSE OBJECTIVES:

- 1. To gain an understanding of microbe structure and function.
- 2. To gain a knowledge of human infectious diseases and how they are transmitted.
- 3. To gain an understanding of human infectious disease that will facilitate future work in the medical field.
- 4. To develop critical thinking skills with respect to infectious diseases of the human body.

LEARNING OUTCOMES:

Upon successful completion of this course a student will have a working knowledge of the biological basis of the infectious diseases of the human body.

TRANSFERABILITY:

Transfer: UA, UL, AU, AF, CU, KUC

"This course is part of the block transfer agreement with the University of Alberta in the Collaborative BScN Program. Admission to the fourth year of the Program and registration at the U of A will be contingent upon confirmation by the Faculty of Nursing that the first three years of the Program have been completed with satisfactory academic standing. For promotion to Year 4 at the U of A, a student is required to pass all previous courses and obtain a minimum cumulative GPA of 2.0 on a 4.0 point scale in the first three years of the program. If these conditions are met, the student will be granted a block transfer of work completed at GPRC to the U of A record."

*Warning: Although we strive to make the transferability information in this document up-to-date and accurate, the student has the final responsibility for ensuring the transferability of this course to Alberta Colleges and Universities. Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at Alberta Transfer Guide main page http://www.transferalberta.ca or, if you do not want to navigate through few links, at http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. **Students** are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

EVALUATIONS:

| Quiz I - | 15% | - In order to defer an exam due to |
|---------------------|-----|--|
| Fall Midterm Exam - | 30% | illness you will require a medical note. |
| Quiz II - | 15% | |
| Online Activities - | 5% | |
| Winter Final Exam - | 35% | |

GRADING CRITERIA:

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

| Alpha | 4-point | Percentage | Alpha | 4-point | Percentage |
|-------|------------|------------|-------|------------|------------|
| Grade | Equivalent | Guidelines | Grade | Equivalent | Guidelines |
| A+ | 4.0 | 90-100 | C+ | 2.3 | 67-69 |
| А | 4.0 | 85-89 | С | 2.0 | 63-66 |
| A- | 3.7 | 80-84 | C- | 1.7 | 60-62 |
| B+ | 3.3 | 77-79 | D+ | 1.3 | 55-59 |
| В | 3.0 | 73-76 | D | 1.0 | 50-54 |
| B- | 2.7 | 70-72 | F | 0.0 | 00-49 |

COURSE SCHEDULE/TENTATIVE TIMELINE:

Section YA1: Winter term 2016, 22.5 hours in 7.5 weeks

| Jan. 8 | Unit 12a | Ch. 20: pg. 558 - 570. |
|---------|------------------|------------------------|
| Jan. 11 | Unit 12b | Ch. 20: pg. 570 – 585. |
| Jan. 15 | Unit 13 | Ch. 21 |
| Jan. 18 | Unit 14 | Ch. 22 |
| Jan. 22 | Field Trip | |
| Jan. 25 | Catch-up/ Review | |
| Jan. 29 | Quiz II | |
| Feb. 1 | Unit 15 | Ch. 23 |
| Feb. 5 | Unit 16 | Ch. 24 |
| Feb. 8 | Unit 17 | Ch. 25 |
| Feb. 12 | Unit 18 | Ch. 26 |
| Feb. 15 | Winter Break | |
| Feb. 19 | Winter Break | |
| Feb. 22 | Catch-up/ Review | |
| Feb. 26 | Final Exam | |
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Section YA2: Winter term 2016, 22.5 hours in 7.5 weeks

| Feb. 29 | Unit 12a | Ch. 20: pg. 558 - 570. | |
|--|------------------|------------------------|--|
| Mar. 4 | Unit 12b | Ch. 20: pg. 570 – 585. | |
| Mar. 7 | Unit 13 | Ch. 21 | |
| Mar. 11 | Unit 14 | Ch. 22 | |
| Mar. 14 | Catch-up/ Review | | |
| Mar. 18 | Field Trip | | |
| Mar. 21 | Quiz II | | |
| Mar. 25 | Good Friday | | |
| Mar. 28 | Unit 15 | Ch. 23 | |
| Apr. 1 | Unit 16 | Ch. 24 | |
| Apr. 4 | Unit 17 | Ch. 25 | |
| Apr. 8 | Unit 18 | Ch. 26 | |
| Apr. 11 | Unit 18 | | |
| Final Exam – Scheduled by the Registrar's Office | | | |

STUDENT RESPONSIBILITIES:

Students are responsible for the course material presented in lectures and assigned readings.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Admission Guide at <u>http://www.gprc.ab.ca/programs/calendar/</u> or the College Policy on Student Misconduct: Plagiarism and Cheating at <u>http://www.gprc.ab.ca/about/administration/policies/</u>

**Note: all Academic and Administrative policies are available on the same page.