

# Syllabus

## Biology 2259 FRL: Clinical Microbiology

## Dr. Sarah Rigley MacDonald

## **Course Information**

## Location

This is a self-paced online course where you will independently complete online activities, as provided in this course.

#### **Instructor Contact Information**

| E-mail:                                      | Sarah.RigleyMacDonald@unb.ca  |  |  |
|--|---|--|--|
| Office hours:                                | The instructor is available to meet students on Tuesdays & Thursdays from 9am to 12pm. Please e-mail the instructor in advance to book a meeting time and receive your link to a virtual meeting session. |  |  |
| Typical e-mail response<br>time:             | 3-5 business days. If you have something urgent – please mark it as urgent and I will do my best to respond faster.   |  |  |
| Typical time to receive feedback and grades: | Quizzes are automatically marked, exam #1 & #2 can take up to 2 weeks and final exams are graded within 5 business days.  |  |  |

## Course Objectives

By the end of this course, students will be able to:

- Characterize and classify each of the major classes of microorganisms.
- Differentiate normal and pathogenic flora.
- Describe the diagnostics processes within clinical microbiology.
- Explain the mechanism of action of vaccines and antibiotics.
- Describe structure, growth and metabolism of bacteria and viruses.
- List and describe the major groups of clinically relevant bacteria and viruses.

## Prerequisites and Technical Skills

There are no prerequisites or necessary technical skills required for this course. But, it is a good idea to try and familiarize yourself with UNB's Desire2Learn (D2L) learning management system and also the secondary platform that will be introduced in this course, called McGraw-Hill Connect.

If you learn that you cannot take the course, please contact UNB's Registrar.

## Course Resources

## **Required Resources**

#### **Textbook**

Microbiology Fundamentals: A Clinical Approach. Cowan 4th Edition. McGraw-Hill.

Students are required to also have access to the Connect platform.

#### What is Connect?

Connect is an online homework and learning management platform from McGraw Hill Education. Many of your course assignments will be delivered through Connect. The e-book version of your textbook is also available through this platform.

You can purchase Connect access through your UNB D2L account. Login to D2L, and enter your course, then click on the Connect link (<a href="https://connect.mheducation.com/class/biol2259">https://connect.mheducation.com/class/biol2259</a>), which will take you to the Connect registration page where you can follow the prompts.

At that time, you will need to do one of the following:

- Enter your access code
- Purchase access online
- Begin your 14-day Temporary Access period

**Please note:** After you register, you will have the option to purchase a low-cost, binder-ready, loose-leaf, print-version of the text through Connect. This is optional. If you choose to purchase a copy, a full-color, loose-leaf version will be shipped to you.

To view a video of the registration process, go here: <a href="http://video.mhhe.com/watch/">http://video.mhhe.com/watch/</a>

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If you are having trouble registering for or accessing Connect, please contact McGraw Hill Education's Customer Support. Live chat, email, and phone support are available 7 days a week.

When contacting a support agent, you will always receive a case number. It will be important to save this case number if additional follow up or documentation is needed.

Website: www.mhhe.com/support | Phone: (800) 331-5094 Hours (EST)

Sunday: 12 PM - 12 AM Monday - Thursday: 24 hours

Friday: 12 AM - 9 PM Saturday: 10 AM - 8 PM

Ensure your computer meets system requirements by going to this link: <a href="http://connect.mheducation.com/">http://connect.mheducation.com/</a>

connect/troubleshoot.do

## Technology

You will need access to a computer with the following requirements: <a href="https://">https://</a>

mhedu.force.com/CXG/s/article/McGraw-Hill-System-Requirements-HigherEd

You will need access to the Connect software: <a href="https://">https://</a>

connect.mheducation.com/class/biol2259

You will be downloading/accessing the following programs during this course:

PDF Reader and McGraw-Hill Connect

Please note that instructions on how to download/access these programs will be provided during the relevant course session. Students are expected to read, understand and abide by all privacy policies and terms of use for all technology used in the course.

#### Assessments

| Assessments   | Description   | Weight<br>(out of<br>100%) |
|---|---|----------------------------|
| Quizzes   | Quizzes One open-book quiz for each module on Connect (8*2.5%)                            |                            |
| Labs  | Virtual labs for each module on Connect (8*2.5%)  |                            |
| Exams 1 and 2   | Exams 1 and 2 Closed-book exams, 90 minutes and 60 multiple choice questions each (2*15%) |                            |
| Final Exam Closed-book exam, 180 minutes, 160 multiple choice questions |   | 30%                        |

## **Exam Invigilation**

Please read through the Course Exam Guide section in the Start Here module of D2L for instructions on how to arrange your exams for invigilation.

Any exam completed on or after May 1st, 2022, will be required to perform the Respondus "Environmental Check" during the start-up sequence before the assessment begins.

Environmental scans should provide clear video footage of the entire workspace in which you are taking your exam to ensure that the testing environment is secure.

You are encouraged to pause at critical points of scanning the environment to provide a 360-degree perspective of your workspace.

A thorough environmental scan is typically completed in 30-60 seconds.

## Grading

Final grades will be reported as follows:

| Letter<br>Grade | Percentage<br>Grade Range | Grad<br>e<br>Point<br>s | Criteria                           |  |
|-----------------|---------------------------|-------------------------|------------------------------------|--|
| A+              | 90-100                    | 4.3                     | Excellent performance              |  |
| Α               | 85-89.9                   | 4.0                     | Excellent performance              |  |
| A-              | 80-84.9                   | 3.7                     | Excellent performance              |  |
| B+              | 75-79.9                   | 3.3                     | Good performance                   |  |
| В               | 72-74.9                   | 3.0                     | Good performance                   |  |
| B-              | 69-71.9                   | 2.7                     | Good performance                   |  |
| C+              | 65-68.9                   | 2.3                     | Satisfactory performance           |  |
| С               | 60-64.9                   | 2.0                     | Satisfactory performance           |  |
| D               | 50-59.9                   | 1.0                     | Less-Than-Satisfactory performance |  |
| F               | 0-49.9                    | 0.0                     | Failure                            |  |
| WF              | 0                         | 0.0                     | Failure                            |  |

## Study Plan

| Module #<br>(Suggested<br>time to<br>complete)   | Module Topic Title  | Textbook<br>Readings<br>and<br>Resources | What's Due?                   |  |  |  |
|--|---|--|-------------------------------|--|--|--|
| Module 1<br>(2 weeks)  | Introduction to the Clinical<br>Microbiology  | Chapters 1-3                             | Quiz #1 & Lab #1 (3<br>parts) |  |  |  |
| Module 2<br>(2 weeks)  | Microbial Growth  | Chapters 4-6                             | Quiz #2 & Lab #2 (5<br>parts) |  |  |  |
| Exam #1 (Modules 1&2 only) 90 minutes, closed book, completed on D2L using Respondus Monitor                       |   |  |                               |  |  |  |
| Module 3<br>(1 week)   | Control of Microbial Growth & Human/Microbial Interaction   | Chapters 9-11                            | Quiz #3 & Lab #3 (3 parts)    |  |  |  |
| Module 4<br>(1 week)   | Host Defenses   | Chapters 12 & 13                         | Quiz #4 & Lab #4 (1 part)     |  |  |  |
| Module 5<br>(2 weeks)  | Diagnosing Infections & Infectious Diseases of the Skin and Eyes  | Chapters 15 & 16                         | Quiz #5 & Lab #5 (2<br>parts) |  |  |  |
| Exam #2 (Modules 3-5 only) 90 minutes, closed book, completed on D2L using Respondus Monitor                       |   |  |                               |  |  |  |
| Module 6<br>(2 weeks)  | Infectious Diseases of the<br>Nervous, Cardiovascular and<br>Lymphatic Systems  | Chapters 17 & 18                         | Quiz #6 & Lab #6 (6 parts)    |  |  |  |
| Module 7<br>(2 weeks)  | Infectious Diseases of the<br>Respiratory and Gastrointestinal<br>Systems   | Chapters 19 & 20                         | Quiz #7 & Lab #7 (3<br>parts) |  |  |  |
| Module 8<br>(2 weeks)  | Infectious Diseases of the<br>Genitourinary System and the<br>Interconnections of the<br>Environment, Humans and<br>Animals | Chapters 21 & 22                         | Quiz #8 & Lab #8 (3<br>parts) |  |  |  |
| Final Exam (Modules 1-5 40%, Modules 6-8 60%)  180 minutes, closed book, completed on D2L using Respondus  Monitor |   |  |                               |  |  |  |

**Monitor** 

## **Academic Integrity**

For information on Academic Integrity, please go to the <u>Undergraduate Calendar, Section B, Academic Regulation VIII. Academic Offences</u> or the <u>School of Graduate Studies Calendar, University Regulation</u> 29. It is the student's responsibility to know the regulations.

## **Unethical Practices**

The following behaviours are considered unethical:

- Telling an instructor that you 'need' a certain grade.
- Asking for extra assignment(s) for the purpose of raising your grade.
- Asking your grade to be raised because it is very close to the next higher grade.
- Asking a grade to be raised because you did very well on one part of the course or grading scheme.
- Asking for a higher grade because you did not like the grading scheme.
- Asking to be allowed to turn in an assessment late even a few minutes late because of computer or printer problems, or any other reason.
- Asking to be treated better than other students by making an exception to the rules.
- · Asking for any other unfair advantage in grading.

## **Student Support**

UNB provides many resources to help and inform students. Please visit the Contact Us section of this course on D2L for more information.