
Microbiology
impacts us
WEAR A
FACE MASK

**Recent events have highlighted how relevant microbiology is to our lives. Welcome to:**

# Introductory Microbiology (BIOL 2070)

Calendar description: Growth, genetics, structure, physiology, and diversity of microbes and viruses.
Prerequisites: 2 first-year BIOL courses - BIOL-1111 (55-140) and BIOL-1101 (55-141) highly recommended.

Although microbes are tiny (often invisible!), they are abundant, almost everywhere, and have a major impact on life as we know it. Microbiology is a huge area of study of very small things!

Big questions driving this course are:

*What do you need to know about microbiology as a biology/science student?*
*What do you need to know about microbiology to be an informed individual in society?*

We will look at some of the major features of microbes, ways that microbes differ, how we study them, and how microbes impact humans and other organisms. We will consider microbial growth … and how to control/prevent microbial growth. We'll also explore some of the roles of microbes in health and disease, in the environment, and applied settings.

| BIOL 2070 Winter 2022 | What do you need? | Activities & expectations | Assessment overview | Ways to interact |
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| | An internet connection is required. The W22 course is completely online. | View asynchronous video lectures and materials for each module. | Regular quizzes & small assignments (most weeks) | A few Q & A sessions will be offered in Teams by myself and TAs. These will be recorded. |
| | An online textbook and other sources available at no cost to UWindsor students. | Approximately 5 to 10 hours most weeks should be dedicated to this course. | Personal Microbiology Project – create an education or outreach resource on a microbiology topic that interests you. | You can use email or Teams to communicate with me and the TAs. I will usually respond within 24 hours (except for most weekends). |
| | Access to UWindsor Blackboard, Teams & other tools | Note important dates in the course. Check Blackboard regularly (i.e., several times a week). | Final exam and reflection (online in exam period – date/time set by Registrar's Office). | We will use tools in Blackboard, Teams, and Perusall (possibly others) for student interactions. |

*Winter 2022 note:*
We are going into another pandemic term, still dealing with various difficult circumstances and stresses. These are not optimal times, but I'll be doing my best to teach, communicate with, challenge and support you. I know that you will also be doing your best. Please remember that your health and well-being are more important than this (or any) course.

This course is completely online and asynchronous in W2022. Course content is available in videos (links in Blackboard), other materials in Blackboard, and the textbook. Students are **not** required to purchase any books, software/apps nor access codes for this course.

| Tools/ sites we will be using: | **Blackboard** (course content, assessments, announcments, links to videos, etc.**),** **Microsoft Teams** (a few optional Q & A sessions – will be recorded; office hours)**,** **Perusall** (assignments)**:** create account at https://perusall.com/ with course code: **NOEL-VK8P6** Videos on **YouTube** and **Microsoft Stream** *Other tools may be used.* |
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**Instructor: Dr. Tanya Noel**

she/her pronouns

tnoel@uwindsor.ca , Biology 112, (519) 253-3000 x2705

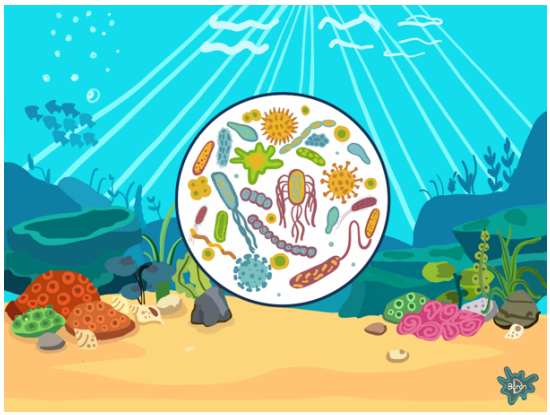
**Office/student hours**:
Scheduled times TBA.
I'm also happy to set up individual/small group meetings by appointment at other times (for Teams/Zoom).

**Textbook**: *Microbiology: Canadian Edition*
This is a **free** online textbook.
(It is based on the OpenStax Microbiology textbook. The OpenStax book is free as pdf/on web but available to buy in hard copy from Amazon. Alternatively, *Brock Biology of Microorganisms* is a good option if you want a hard copy textbook.)
https://ecampusontario.pressbooks.pub/microbio/


**What you'll be learning:**

- The scope of microbiology & impact of microbes
- Microbial structure (cell structure/function, & how viruses replicate)
- Diversity of bacteria, archaea, microbial eukaryotes.
- Infectious particles: viruses, viroids, & prions
- Metabolism & growth of microbes
- Microbial growth control
- Microbial genomics & genetics
- Other areas of microbiology (e.g., microbial ecology)

(More details and learning objectives provided in Blackboard.)



**The University of Windsor offers two versions of an introductory microbiology course: BIOL 2070 (Introductory Microbiology) and BIOL 2071 (Introductory Microbiology and Techniques). BIOL 2070 (this W22 class) does not include a lab component.** Some professional programs require a microbiology course with a lab, so please make sure that BIOL 2070 will be a suitable course for you. BIOL 2071 (the lab version of the course) is planned for Fall 2022. BIOL 2070 is an antirequisite to BIOL 2071 – students will NOT get credit for taking both. Students who have taken BIOL 2070 and enrol in BIOL 2071 to complete a microbiology lab must complete both lecture and lab portions of the course. There is no mechanism that allows students to do the lab without the lecture.

## What goes into my grade?

### Graded components:

1. Weekly quizzes (10/12 total) 36%
2. Reading/discussion assignments (RDAs) 6/8 total: 15%
3. Personal micro project (PMP) - total: 33%
   a) Initial interest statement (due Feb. 7) 5%
   b) Project plan & references (due Mar. 7) 10%
   c) Reflection/insight discussion (due Mar. 21) 2%
   d) Project deliverable, reflection (due Apr. 4) 16%
4. Final exam: 16%

### Notes:

[1] Quizzes open Tuesdays 6 PM, and are **due Fridays by 11:59 PM**. While most quiz questions focus on the most recent module and readings (including RDA/Perusall ones), expect some questions on previous material and/or integrating concepts across modules. Online, open-book. 2 attempts/quiz, highest score is used. Expect ~15-30 minutes/attempt (varies by length of quiz).
[2] RDAs will primarily be assignments in Perusall, where students annotate readings and post comments, questions, and responses to others – see page 9 for more info. There may be some assignments in other formats (e.g., in Blackboard discussion board). Due most **Mondays 11:59 PM** unless a PMP submission is due that day.
[3] The Personal Microbiology Project (PMP) is an education or outreach resource that you create on a microbiology topic of your choosing. The early submissions/activities are designed to help you prepare your final project deliverable. **PMP components are due by 11:59 PM on the dates listed above (all Mondays).** See Blackboard for more information.
[4] The final exam is cumulative, online, open book, and includes a reflection component. Date/time TBD by Registrar's Office. Format is likely to include both multiple-choice and written answer questions, designed to be completed within an hour (but you'll be given 90 minutes).

There are no midterms in the course.

More information about all items (including expectations/marking details) will be available in Blackboard.

### Flexibility elements:

- ◊ [1] Quizzes: Best 10/12 scores averaged in mark – you can miss up to 2 quizzes without impacting your score.
- ◊ [2] RDAs: Best 6/8 scores used in grade (i.e., students do not need to do all assignments if they choose not to). Note that students are expected to complete all readings, and questions on the readings may be on quizzes and final exam.
- ◊ [3] PMP: Students choose (microbiology-related) topic of interest. Various options for deliverable format.

### Why Is the Course Set Up This Way?

This course is designed in consideration of cognitive science evidence-backed best practices, which recommend the use of frequent quizzing, exercises, interleaving, and varied practice. (More info about this is in Module 0!) You'll have regular opportunities to retrieve and connect concepts, helping retain and build your knowledge and skills. Expectations about learning objectives and a regular structure help with time management and scheduling. Self-reflection components (in PMP, assignments and the final exam) help support deep and experiential learning. I'm happy to discuss this (and other aspects of science education) if you're interested!

As we are all still dealing with constraints and challenges relating to COVID-19 and pandemic life, I tried to include aspects of flexibility and choice where possible. (A challenge for me is providing flexibility while maintaining consistency across a large class … particularly during a continuing pandemic.)

### Timing/due date notes (most weeks):

Check Blackboard regularly, and watch video lectures before Friday.
Mondays: RDA or PMP component due by 11:59 PM. (Next RDA available at least 1 week ahead of due date.)
Tuesdays: Quiz opens at 6 PM.
Fridays: Quiz due/closes at 11:59 PM.

Modules, anticipated timing, relevant chapters in textbook (Microbiology: Canadian Edition & OpenStax version). Module videos/materials will open by 1 PM on the Saturday prior to the scheduled week.
*(Note that additional readings/resources are present in some modules and Perusall.).*
Module 0: Orientation to the course **(available before Jan. 17)**
Module 1: Intro to microbiology & different microbes - Ch 1, **Week of Jan. 17**
Module 2: Working with microbes - Ch 2, **Week of Jan. 23**
Module 3: Viruses & other acellular pathogens - Ch 6, **Week of Jan. 30**
Module 4: Microbial cells (structure/function in bacteria, archaea, microbial eukaryotes) - Ch 3, **Weeks of Feb. 7 & 14**
*W22 Reading Week is Feb. 19-27.*
Module 5: Diversity of bacteria, archaea, & microbial eukaryotes - Ch 4, 5, 8, **Week of Feb. 28**
Module 6: Microbial metabolism, growth - Ch 8, 9, **Week of Mar. 7**
Module 7: Microbial growth control - Ch 14, 15 (Ch. 13, 14 in OpenStax version), **Week of Mar. 14**
Module 8: Intro to microbial genomics, genetics, biotech - Ch 12, 13 (Ch. 11, 12 in OpenStax), **Weeks of Mar. 21 & 28**
*[**Weeks of Mar. 21 & Apr. 10** are for review, reflection, and integration]*

Your health and wellness are important!
If you anticipate issues related to the format or requirements of this course, or encounter problems during the term, please let me know. I would like us to discuss ways to ensure your full participation in the course, and work with you to consider options and plan how to best coordinate accommodations.
Students who require accommodations are encouraged to consult with Student Accessibility Services: http://www.uwindsor.ca/studentaccessibility/

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| Student Counselling Centre<br>http://www.uwindsor.ca/studentcounselling/<br>Room 293 CAW Centre<br>519-253-3000 ext 4616<br>Monday – Friday: 8:30 am -12 pm; 1 pm - 4:30 pm.<br>scc@uwindsor.ca | Student Health Services<br>http://www.uwindsor.ca/studenthealthservices/<br>519-973-7002 or ext. 7002<br>(To make or cancel a Doctor's appt.)<br>Room 242 CAWSC<br>Monday-Friday: 9 am- 12 pm; 1 pm - 4 pm |
| Full list of UWindsor student support services:<br>http://www.uwindsor.ca/156/lots-student-support-services | **Good2Talk: 24 hour Student Helpline**<br>1-866-925-5454 |

**I want the course to be challenging, but also foster an inclusive, equitable environment supporting your learning, growth, and success.**
**Please talk to me if you have any concerns or questions!**

## Stuff I have to include – course policies:

1**. MISSED QUIZ OR READING/DISCUSSION ASSIGNMENT**: It is anticipated that some students may miss (or choose not to complete) one or two quizzes and/or reading/discussion assignments (RDAs). For the quizzes and RDA components, the grades will be calculated excluding the two lowest/missed scores in each. Please don't notify me for missing one or two quizzes or RDAs. ***If you miss more than two quizzes, or more than two RDAs please let me know*** as soon as possible to discuss your circumstances and what options (if any) there are.
2. **LATE WORK:** For some assessments it will not be possible to submit late work - (e.g., quizzes, as quiz answers are available after the due date). For items where late work is accepted, penalties apply. Details of penalties are provided in Blackboard/assignments. (Note: I've tried to be as flexible and provide as much time as possible for due dates that allow us to provide feedback/marks to students in a reasonable timeframe – typically at least a day or more beyond what was expected pre-

pandemic.) If you are dealing with circumstances that are interfering (or likely to interfere) with your ability to submit work on time, please contact me as early as possible.

**3. FINAL EXAM CONFLICTS: Final exam conflicts must be brought to the attention of the Registrar's Office once final exam dates/times are posted.** (This must be done shortly after the final exam times are made available.)

4. **Self-reporting of medical and compassionate absences**: Doctor's notes are not required for medical absences. Please use **UWinsite Student** to report illness (if necessary – see policies 1 & 2 above). For how-to information:**ask.UWindsor article**.

5 **REMARKING OF GRADED WORK**: If you believe that a written answer on an assignment was marked incorrectly, you can provide your rationale for remarking **within 1 week of the item being made available to you**. Please discuss concerns (politely) with your marking GA/TA first before contacting me. Note: Remarking can result in the mark being raised, confirmed or lowered.

6. **DISCUSSION OF MARKS/GRADES**: In order to be fair and consistent with regards to the entire class, individual grades are **not** negotiable. Once grades are posted, there will be no further changes (including "rounding up" or curving) aside from error corrections. It is not possible to provide more opportunities for "extra credit" assignments to all students, and inappropriate for me to provide such assignments to individuals. **If there is a clear error in your mark (calculation, clerical, etc.) contact me as soon as possible at tnoel@uwindsor.ca.** It is unlikely that you will receive a response regarding any other mark-related queries.

7. **EMAIL POLICY**: Students should use their uwindsor.ca email address for correspondence relating to the course. (Email from other addresses, such as Hotmail or Yahoo, are likely to be filtered as spam/junk.) It's helpful to have an indication of your email topic in the subject line. The body of the email should have a clearly written message and include your **full name and student number**. It helps me if I know the specific course you're in (Intro Micro or BIOL 2070). Please check to see if your question has been addressed in the syllabus or in Blackboard before emailing (as I get a lot of emails).

Note: In an attempt to use my professional and personal time more effectively, I try to restrict checking email to a few times a day during business hours, so you may not get a response right away (particularly if you email in the evening or on the weekend). If your email is urgent, please indicate that in your subject line.

8. **BLACKBOARD AND MS TEAMS PROBLEMS** should be directed to IT services - submit a request through the TeamDynamix support portal: http://www.uwindsor.ca/its/

9. Student Evaluation of Teaching forms will be administered online by the university.

10. Final grades will use the percentage scale as described in the University of Windsor Policy on Grading and Calculation of Averages.

11. **DISCUSSION BOARD/PERUSALL CODE OF CONDUCT**. Students are asked to participate in online forums in this course. In my experience, the discussion on course forums has typically been polite and respectful, and I hope this will continue. Students are expected to follow the University of Windsor student code of conduct (see next section), and:

i. **Check to see if your question has already been posted**. (You can **search** the forums – you don't have to read each post!)
ii. **Use a clear, informative subject line**. Try to be as specific as possible.
iii. **Post comments appropriate to the particular discussion**. Off-topic posts may be moved or deleted.
iv. **Be respectful**. Posts containing personal insults/attacks/intimidation/profanity will be deleted. (It is also worth remembering that your instructor reads forum posts!)
v. **Post only material relevant to the course/microbiology**. Other posts are likely to be deleted.
vi. While it is appropriate to engage in debate/discourse on biological topics, such **discussions should be respectful and evidence-based**. Evidence should be from trusted sources – consult with the library or your instructor if you are not sure!
vii. Any posts which appear to violate our code of conduct may be edited, moved to a hidden forum or deleted at the discretion of instructors/moderators. If posts give indications of violations of academic honesty or the University student code of conduct, further action will be taken.

**I trust every student in this course to comply with all of the provisions of the University's honour code and student code of conduct.**

## University of Windsor Honour Code:

Students at the University of Windsor consistently strive to attain the highest standards of academic performance. As part of these upmost principles, students of the University of Windsor pursue all endeavours with honour and integrity, and will not tolerate or engage in academic or personal dishonesty.

## Student conduct

Students are expected to be familiar with and follow University of Windsor policies, including policies regarding conduct and academic integrity.

UNIVERSITY OF WINDOR STUDENT CODE OF CONDUCT (Senate Policy Excerpt) - Principles

The University of Windsor is a community of scholars committed to the motto of: Goodness, Discipline, and Knowledge. As in any community, integrity is the foundation upon which all else is built. Fundamentally, a university is a place where those eager to learn gather to advance knowledge in an open, accepting and friendly manner with a goal to making important contributions to society.

• It is a place where freedom of expression is protected vigorously and uncompromisingly and where civility of expression in word and deed is the code of conduct.
• It is a place where all people are treated fairly without concern to religion, race, colour, national origin, sex, sexual orientation, disability or age.

As such, students are expected to commit to a code of behaviour that stresses respect for the dignity and individuality of all persons, and the rights and property of others. They are expected to practice personal and academic integrity, to take responsibility for their own personal and academic commitments, and to contribute to the University community to gain fair, cooperative and honest inquiry and learning. They are also expected to respect and strive to learn from differences in people, ideas, and opinions, and refrain from and discourage behaviours which threaten the freedom and respect that every individual deserves.

All students, student groups, and organizations have the responsibility to maintain a high standard of conduct based on these principles. It is important to understand that transgressing the code of behaviour or assisting others in a transgression are equally wrong. Students are expected to be individually responsible for their actions whether acting individually or in a group. All students should know that the Senate Bylaw on Academic Integrity (Bylaw 31) addresses this issue as it relates to academic misconduct and all students should be familiar with the content of this Bylaw. Further, students should know that non-academic misconduct is addressed under the purview of the Board.
https://lawlibrary.uwindsor.ca/Presto/content/Detail.aspx?ctID=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&rID=NTk=&qrs=RmFsc2U=&q=KFVuaXZlcnNpdHlfb2ZfV2luZHNvcl9DZW50cmFsX1BvbGljaWVzLkFsbFRleHQ6KFN0dWRlbnQgQ29kZSBvZiBDb25kdWN0KSk=&ph=VHJ1ZQ==&bckToL=VHJ1ZQ==&rrtc=VHJ1ZQ==

Students are expected to be familiar with and follow University of Windsor policies, including policies regarding academic integrity. Academic integrity involves avoiding plagiarism, cheating and other ethical breaches. Plagiarism and other forms of academic dishonesty will not be tolerated, and all instances will be reported to the Associate Dean of Science for disciplinary action under Senate Bylaw 31: Student Affairs and Integrity. Tests, assignments and lecture recordings in this course are protected by copyright; reproduction or dissemination of their contents or format is strictly prohibited. Students who violate this rule or engage in any other form of academic dishonesty will be subject to disciplinary action.

Use of SafeAssign® Plagiarism-Detection Service in This Course

1. Rationale. The University believes in the right of all students to be part of a University community where academic integrity is expected, maintained, enforced, and safeguarded; it expects that all students will be evaluated and graded on their own individual work; it recognizes that students often have to use the ideas of others as expressed in written, published, or unpublished work in the preparation of essays, papers, reports, theses, and publications. However, it expects that both the data and ideas obtained from any and all published or unpublished material will be properly acknowledged and sources disclosed. Failure to follow this practice constitutes plagiarism. The University, through the availability of SafeAssign ®, desires to encourage responsible student behaviour, deter plagiarism, improve student learning, and ensure greater accountability.
2. Procedure. SafeAssign ® may be used for student assignments/papers in this course. You will be advised how to submit your papers to SafeAssign ® yourself. Note that students' papers that are submitted to SafeAssign ® become part of the SafeAssign ® database. This assists in protecting your intellectual property. However, you also have the right to request that your paper(s) not be run through the student papers database of SafeAssign ®. If you choose to do so, that request must be communicated to me in writing at the beginning of the course, and as an alternative, you must submit your final work along with extensive documentation (dated printouts of your literature/library searches, hand-written and typed drafts, and photocopies of all references).

## General learning outcomes of this course:

| **At the end of this course, the successful student will know and be able to:** | **A UWindsor graduate will have the ability to demonstrate:** |
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| A.<br>- describe, relate, and apply a wide range of microbiology concepts/knowledge, including: the different types of microbes and infectious particles (including viruses and prions); structure and function of microbes and infectious particles; microbial diversity; microbial metabolism and growth; control of microbial growth; bacterial genetics and genomics. | A. the acquisition, application and integration of knowledge |

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| - describe key biochemical and biological principles relevant in microbiology concepts.<br>- apply key biochemical and biological principles in a microbiology context (e.g., comparing and contrasting the nature and structure of cell wall polymers in bacteria, archaea, and fungi and considering respective susceptibilities to peptidoglycan-affecting antibiotics).<br>- reflect on microbiology knowledge, identifying aspects relating to everyday life, careers, and other courses. | |
| B.<br>- collect, read, analyse, synthesize and evaluate relevant microbiology information in the textbook, secondary scientific literature, and popular science publications.<br>- (2071 only) make, record, and analyse microbiological observations; record and present analyses in written and/or graphical form. | B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy) |
| C.<br>- apply the scientific method and microbiology knowledge to solve problems involving basic microbiology scenarios.<br>- critically analyse case studies involving key microbiology concepts.<br>- access and effectively utilize secondary research literature for solving microbiology problems.<br>- (2071 only) collect and analyse data from common microbiology tests/procedures. | C. critical thinking and problem-solving skills |
| D.<br>- summarize and explain key microbiological concepts from a reference book, review article, and/or popular science article.<br>- express microbiological concepts in written form.<br>- analyse microbiological data (e.g., bacterial growth curve values) and interpret results.<br>- solve quantitative problems relating to microbiology (e.g., calculating dilutions, bacterial growth rates).<br>- (2071 only) solve quantitative problems relating to microbiology laboratory experiments (e.g., converting spectographic transmittance to absorption values). | D. literacy and numeracy skills |
| E.<br>- follow the rules of academic integrity.<br>- (2071 only) demonstrate microbiology technical techniques, use of common microbiology lab equipment, appropriate disposal procedures, and safe laboratory practice following WHMIS and BSL-II guidelines. | E. responsible behaviour to self, others and society |
| F.<br>- communicate microbiology concepts verbally in class through discussions and/or debates.<br>- communicate microbiology concepts in writing through assignments and written examinations.<br>- (2071 only) communicate microbiology via preparation of laboratory assignments and reports.<br>- (2071 only) communicate verbally with graduate assistants, lab partner(s), and neighbouring laboratory groups to effectively carry out experiments and share data where appropriate. | F. interpersonal and communications skills |
| G.<br>- participate constructively and cooperatively in small group activities in class.<br>- (2071 only) work effectively with a partner/lab group to carry out microbiology experiments, including time management for follow-up work. | G. teamwork, and personal and group leadership skills |
| H.<br>- express or illustrate microbiology concepts creatively (e.g., through artwork, poetry, or music). | H. creativity and aesthetic appreciation |
| I.<br>- identify aspects of microbiology that are relevant for personal reasons and/or academic/professional goals. | I. the ability and desire for continuous learning |

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Thanks for reading!

## Perusall information

To use Perusall, you will need to set up your account/register the first time:

1. Go to perusall.com, click Log in at the top, and then either log in using your Facebook, Twitter, or Google account, or register to create an account using your email address and password. (Please use your uwindsor.ca email.)
2. Select "I am a student" and enter the course code: **NOEL-VK8P6**
3. Enter your student number when prompted to do so. (This is how we will be able to assign marks for your work so please double-check that your student number is correct.)

During an assignment, you may find that you get a lot of emails from Perusall. It's recommended that you go into "Notifications"->"Manage my notifications" and choose which email notifications you want to receive.

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**More on Perusall assignments and thoughtful annotations**

Perusall is intended to give you practice with readings related to the course, help you understand material better, and communicate. In Perusall, you will be collaboratively annotating articles/text with others in the class. Collaborative annotations (including help you provide and receive from others) will let you work through areas of confusion quickly and will make the process more interesting. While you read, you can receive answers to your questions, help others resolve their questions (helping you learn), and advise the instructor about common areas of confusion and interest.

In an assignment, you'll be given a reading (e.g., a magazine article or scientific paper) to annotate. You can start a new annotation thread by highlighting text, asking a question, or posting a comment; you can also add a reply or comment to an existing thread. Each thread is like a chat with one or more members of your class.

Your goals in annotating each reading assignment are to understand the material, to stimulate discussion by posting good questions or comments, and to help others by answering their questions. You're not expected to be experts in microbiology, but should be considering the readings from the standpoint of someone who understands some Biology. Annotations should be in your own words (though *brief* quotes can be used, using quotation marks and citing the source). You can "mention" a classmate in a comment or question to have them notified, and you'll be notified when peers respond to you. Note: Because there are so many students in the course, Perusall divides students randomly into groups. You'll only be able to see annotations made by students in your group.

Here are some perspectives on characteristics of annotations from previous students:

| Thoughtful annotations: | Less effective/less helpful annotations: |
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| • Deeply explore points in the readings.<br>• Ask thought-provoking questions relating to the topic.<br>• Provide additional information that is not in the text.<br>• Make connections (e.g., within the article/text or to what we're looking at in class).<br>• Describe clearly, in your own words, things that may not be obvious to others.<br>• Incorporate relevant personal perspectives and experiences to the topic.<br>• Help others, by addressing other people's questions or concerns.<br>• Provide reputable sources of information/evidence (with enough information in a citation so that others can access these sources).<br>• Integrate or apply ideas/concepts in a meaningful way. | • Repeat what other people have said without adding anything.<br>• Restate what is in the text without adding/clarifying.<br>• Agree or disagree with another comment without adding additional information or perspectives.<br>• Copy and paste information from a website or provide too much information from other sources at once (information dump).<br>• Respond to someone without actually addressing the original question/comment.<br>• Paraphrase/summarize without adding value.<br>• Do not provide full reference information after mentioning/suggesting a source. |

Annotations should reflect effort put into reading and in discussion with others. We expect to see at least five (5) good annotations that demonstrate this in an assignment. (Just having 5 annotations may not guarantee full points if some or all of your comments/questions don't add to the discussion, or if they're all in the same area of the article/chapter.) You can add more than that, within reason … 20 annotations per assignment is probably too many, unless a number of them are superficial or short comments or questions (which is fine - it is OK to chat with your peers).

For an assignment, we will evaluate annotations you submit. Based on the overall body of annotations for an assignment, you will receive a score. **High-quality annotations demonstrate exceptionally thoughtful, thorough reading of the entire assignment, and provide insight and/or resources that help other readers. For full marks, at least 5 high-quality annotations are required, and annotations should be clear, well-written, and relevant.** Lower scores will be earned if fewer than 5 such annotations are submitted, there are issues with writing (e.g., several grammar/spelling errors), information sources are not appropriate/cited, or other problems. Scores will be posted in Blackboard, with feedback for scores < 5 marks.