

# MICROBIOLOGY LABORATORY (BIOL 3702L) SYLLABUS

## CRNs 20165-20168, SPRING 2020

v. 011320

### Welcome

I am Dr. Chet Cooper, the coordinator for the laboratory component (BIOL 3702L) accompanying the lecture course, Microbiology (BIOL 3702). Two instructors and two undergraduate laboratory assistants will be assisting me.

BIOL 3702 is a four semester-hour, upper-division course at Youngstown State University. The course is intended for undergraduate students majoring in biology, but students in other majors may also find this course quite beneficial. Both the lecture and the laboratory strive to adhere to the

curriculum guidelines established by the American Society for Microbiology

(<https://www.asm.org/Guideline/ASM-Curriculum-Guidelines-for-Undergraduate-Microb>).

Please note, this document is the syllabus for the laboratory component of BIOL 3702. When used in concert with the Lecture Syllabus and the combined Lecture/Laboratory Schedule, all the essential information a student needs for this entire course is covered in detail. All these documents are located in the “Files” section of the required course CONNECT subscription.

BIOL 3702L is an integral component to the overall grade for this upper-division microbiology course. As detailed in the Lecture Syllabus, as well as herein, BIOL 3702L shall comprise 20% of a student’s final microbiology course grade. A student failing to do well in BIOL 3702L will have a definite negative impact on the final course grade.

Please note that the laboratory and lecture component cannot be taken separately. Students must enroll in each concurrently. For those students repeating BIOL 3702, consideration *may* be given for prior work, but enrollment in a laboratory section is still required. Credit for prior work is not guaranteed. Any student repeating BIOL 3702/BIOL 3702L should contact me.

*Carefully and completely* read through this syllabus for BIOL 3702L. If there is something that is not understood or is not clear, please contact me. I will be happy to clarify any misunderstanding or confusion.

**TAKE PARTICULAR NOTICE OF THE FOLLOWING TWO REQUIREMENTS:** Be sure to review the sections entitled “Laboratory Syllabus Acknowledgement” and “Laboratory Safety Rules”. As stated in these respective sections, a **Laboratory Syllabus Acknowledgement Statement (LSAS)** and a **Liability Waiver (LW)** both *must be submitted* by each student to their laboratory instructor no later than the laboratory section meeting the week of January 21<sup>st</sup>. The laboratory instructor must receive a signed *hard* copy of the LW in addition to an electronic copy of the LSAS (the latter submitted as indicated elsewhere in this syllabus). *These are absolute requirements!* The tardy submission of the LW or LSAS shall result in a student not being permitted to participate in any laboratory activities.

I wish an enjoyable and productive semester for each of you!



Dr. Chet Cooper ([crcooper01.yosu.edu](mailto:crcooper01.yosu.edu))  
Professor of Biological Sciences



## Purpose and Contents

This syllabus represents an essential and integral part of the BIOL 3702 – the laboratory component of the course. Collectively, this document, the separate Lecture Syllabus, and the combined Lecture/Laboratory Schedule shall be considered as one comprehensive syllabus serving as a contract between the instructor(s) and the student enrolled in BIOL 3702/BIOL 3702L. All three of these documents are posted in the ‘Files’ section of a student’s BIOL 3702 CONNECT subscription.

The contents of the present document are specific to the laboratory component of BIOL 3702. Portions of this document may refer to either or both of the other two – the separate Lecture Syllabus and the combined Lecture/Laboratory Schedule. In addition, an Open Laboratory Schedule has been posted to the “Files” section of the CONNECT subscription as well as on the on-line laboratory manual (<http://crcooper01.people.yosu.edu/microlab>).

## Syllabus Changes

Due to unforeseen circumstances, Dr. Cooper reserves the right to amend this syllabus and its associated documents at any time during the current semester to meet the course objectives. However, as much as practical, students shall be held harmless regarding any changes made.

## Dr. Cooper's Contact Information and Office Hours

Please refer to the Lecture Syllabus for details regarding Dr. Cooper’s contact information and office hours. Some brief information is provided here.

Office Location: Ward Beecher Science Hall, Room 3123

Telephone/Voice Mail: 330.941.1361

Email: [crcooper01@ysu.edu](mailto:crcooper01@ysu.edu)

Office Hours: By appointment only

## Laboratory Sections and Instructors

There are four different laboratory sections associated with this course that meet twice a week. These sections shall meet in the laboratory located in Cushwa Hall, Room 2321. The meeting days/times of these sections and their instructors are listed below. Each laboratory instructor will separately provide their office hours and contact information.

- Mon./Wed., 8:00 – 9:30 AM  
(CRN 20165)  
Instructor: Ms. Mykaela Wagner  
([mwagner01@student.yosu.edu](mailto:mwagner01@student.yosu.edu))
- Mon./Wed., 3:00 – 4:30 PM  
(CRN 20167)  
Instructor: Ms. Li Sui  
([lsui@ysu.edu](mailto:lsui@ysu.edu))
- Mon./Wed., 1:00 – 2:30 PM  
(CRN 20166)  
Instructor: Ms. Li Sui  
([lsui@ysu.edu](mailto:lsui@ysu.edu))
- Tue./Thu., 10:00 – 11:30 AM  
(CRN 20168)  
Instructor: Ms. Li Sui  
([lsui@ysu.edu](mailto:lsui@ysu.edu))

In addition, Mr. Sam Baker ([sfbaker@student.yosu.edu](mailto:sfbaker@student.yosu.edu)) and Ms. Kaylea Dillon ([kgdillon@student.yosu.edu](mailto:kgdillon@student.yosu.edu)) will be participating as undergraduate assistants during open laboratory periods this semester as follows:

- Ms. Dillon: Tue/Thu., 8:00 – 10:00 AM; Fri., 8:00 – 10:30 AM
- Mr. Baker: Tue. 2:00 – 4:30 PM

Please note that these four individuals act in BIOL 3702L on my authority. I expect all students to give each of them all due respect and to act towards them in accordance with *The Student Code of Conduct* (also known as “*The Code*”; <https://ysu.edu/student-conduct/code-of-conduct>).

### Laboratory Learning Objectives

The laboratory experiences in BIOL 3702L were developed in accord with the recommended curriculum guidelines established by the American Society for Microbiology (<https://www.asm.org/Guideline/ASM-Curriculum-Guidelines-for-Undergraduate-Microb>).

Throughout the semester in BIOL 3702L, students will be taught to:

- Utilize aseptic techniques in the safe handling of microbes and to avoid culture contamination;
- Properly and appropriately employ scientific equipment and methods;
- Isolate pure cultures using selective media and the streak-plate method;
- Identify cell morphology and arrangement by microscopy and simple staining;
- Differentiate bacterial species using specific staining techniques;
- Determine physiological differences among bacteria using biochemical assays;
- Enumerate microbes by serial dilution and viable plate counts;
- Assess the effects of physical and chemical agents on microbial growth;
- Evaluate microbial susceptibility and resistance to antibiotics;
- Isolate and identify fecal bacteria in water using the membrane filter technique;
- Communicate scientific concepts, experimental results, and analytical arguments clearly and concisely.

### Laboratory Learning Outcomes

Knowledge and skill competencies in BIOL 3702L shall be evaluated through written reports, quizzes, technical demonstrations, and online exercises. In addition, a student’s collegiality and professional demeanor shall be observed subjectively.

A student who successfully completes BIOL 3702L shall be able to:

- Practice safe microbiology, using appropriate protective and emergency procedures;
- Demonstrate correct techniques for the isolation, subculture, and maintenance of microorganisms;
- Prepare properly stained specimens for examination using bright-field microscopy;
- Perform pure culture and selective techniques to enrich for and isolate microorganisms;
- Employ appropriate molecular, biochemical, and serological methods to identify microorganisms;
- Estimate the number of microorganisms in a sample using direct microscopic counts, viable plate counts, and spectrophotometric methods;
- Operate microbiological and molecular biological equipment in a safe and appropriate manner;

- Collect and organize experimental data as well as interpret results from this information;
- Use quantitative reasoning and graphing skills to solve problems in microbiology; and
- Develop collegial and effective working relationships with peers.

### Course Materials

Laboratory Manual. A FREE on-line laboratory manual for students enrolled in BIOL 3702L is available at the following URL:

<http://crcooper01.people.yzu.edu/microlab>

Please refer to this page often. It not only contains this syllabus, but also all downloadable laboratory exercises, supporting videos, documents, etc., that hopefully shall make this an outstanding laboratory experience. Any corrections, suggestions, etc., are welcome. Please send any items to Dr. Cooper via email at [crcooper01@yzu.edu](mailto:crcooper01@yzu.edu).

Index Cards. 3" x 5" index cards will be used for a variety of purposes in the laboratory. Students may wish to share in purchasing a package containing 50 or 100 cards. The cards may be ruled or un-ruled and of any color. However, these cards **MUST BE 3" x 5"** in size. Larger or smaller cards are **NOT** acceptable. *Squares of paper are NOT acceptable.*

Other Required Materials. The items listed below are also **required**.

- Laboratory coat/smock. This item does not have to be an "official" lab coat. It can be any garment (e.g., old sweatshirt) that shall protect an individual from common laboratory hazards (e.g., stains, spills, etc.) and which can be disposed.
- Protective eyewear. The University's safety program requires that safety glasses be worn when working in a laboratory (<https://yzu.edu/eohs/eye-safety-program-academic>). Regular glasses will not suffice as a substitute. Neither will the "side shields" for normal eyewear qualify as sufficient eye protection. Students must obtain approved protective eyewear to be worn at in the laboratory.
- Sharpie marker (or another brand of permanent marker). Any color will suffice, although black or blue is preferred. This marker shall be used in place of tape labels by permitting students to write directly on glassware.

**Note: Surgical gloves are NOT provided for students except in special circumstances. Nor are surgical gloves required.** In fact, gloves can not only be a nuisance at times, but also may contribute to spills and breakages – they become slippery when wet. Nonetheless, some students feel more secure if they have gloves available. Hence, students desiring to wear disposable gloves shall need to purchase their own. *For safety considerations, non-disposable and/or heavy-duty cleaning gloves are NOT to be used in the laboratory. In addition, once worn surgical gloves must not be re-used, but properly discarded in the appropriate manner described elsewhere in this document.*

Laboratory Videos. Links to most of the videos used in the BIOL 3702L lectures are available on a separate web page: <http://crcooper01.people.yzu.edu/microlab/videos.html>. Please note that many of these videos are the copyrighted property, whereas others are available to the general public via the internet and vary in copyright protections. Regardless, the videos posted on the above web page are solely for educational purposes of students enrolled in BIOL 3702L and others who are interested in the microbiological sciences.

Lab Fee. There is a fee for BIOL 3702L which helps defray the costs of materials. The fee is included in a student's semester charges billed by the University.

### Attendance

Attendance Expectations. Attendance of each laboratory session is *absolutely required*. A student who is absent during a laboratory activity is very likely to receive a score of "0". Exceptions are detailed in the "Excused Absence" Policy section of the Lecture Syllabus.

**NOTE:** *Vacations are not defined as an excused absence even if plans were made prior to enrolling in BIOL 3702/3702L!*

Tardiness for Laboratory. Tardiness for laboratory sessions is not excusable except for extenuating circumstances. What is deemed excusable is entirely at the laboratory instructor's discretion. ***Chronic tardiness is not acceptable, especially regarding laboratory participation.***

Laboratory sessions will begin **promptly** at their scheduled times. Students are expected to be punctual, if not early for laboratory. A student who is tardy shall not have directions repeated by the laboratory instructor, may not be permitted to participate in laboratory activities, and possibly receive a score of "0" for any laboratory activity being conducted that day. Any decision rendered by the laboratory instructor is final.

University Cancellation and Closing Procedures. See the Lecture Syllabus for details. The same policy applies to students enrolled in BIOL 3702L.

### Laboratory Decorum

General. Students should consult the following resources regarding academic decorum:

Undergraduate Bulletin (<http://catalog.ysu.edu>)

*The Code* (<http://cms.ysu.edu/administrative-offices/student-conduct/student-code-conduct>)

Academic Integrity. See the Lecture Syllabus for details. The same policy applies to students enrolled in BIOL 3702L.

Electronic Communication/Data Storage Devices. Students failing to meet the following highlighted policy expectations will be invited to leave the laboratory until such time that they agree to comply. Moreover, laboratory instructors reserve the right to confiscate any device used in opposition to this policy. Confiscated devices shall be returned after the laboratory period.

During laboratory sections, as well as during open laboratory periods, cell phones, laptop computers, tablets, and the like **MUST NEVER** be used. These devices are **NEVER** to be placed on the laboratory workbench. These devices must be placed in a laboratory "cubbie". Moreover, all cellular telephones or other electronic communication devices must be turned off or set in the quiet/vibration mode of operation. *Students shall not use cell phones during the laboratory period for communication, including texting.* If there is an urgent need to use a cell phone, please quietly retrieve the device and exit the laboratory prior to initiating communication.

**In case of confusion with the above policy, please carefully read the following command:**

**NO PHONE CALLS, TEXTING, ELECTRONIC RECORDING, PHOTOGRAPHY,  
OR WEB SURFING ARE ALLOWED IN THE LABORATORY  
REGARDLESS OF THE TYPE OF ELECTRONIC DEVICE!!!**

Decorum. At all times, students are expected to exhibit appropriate behavior. Such behavior is delimited by University policy (see *The Code* for one of many resources in this regard).

During laboratory instructional periods, holding conversations independent of taking part in an instructor-initiated discussion is not acceptable. Such conversations are inappropriate, distracting, and rude to instructors/peers. Please refrain from conducting conversations that compete with laboratory instruction. If such activity continues, the student(s) involved shall be asked to retire from the laboratory session.

Inappropriate behavior, including disrespect for laboratory instructors, is subject to expulsion from one or more laboratory sessions without the opportunity to begin or complete the assigned exercises. In cases of extremely inappropriate behavior, more severe sanctions shall be sought.

Proper decorum in the laboratory shall include, but is not be limited to, the following:

- *Appropriate* dress is **REQUIRED**. Students are expected to wear clothing that would be appropriate for working in a professional laboratory environment.
- Following all safety rules is **REQUIRED**.
- Disturbing (e.g., moving, using, destroying, etc.) the materials of others is **PROHIBITED**. If done intentionally, this is grounds for removal from the course and possible other charges.
- The use of electronic items (e.g., cell phones) is **absolutely PROHIBITED**.
- Collegiality and acting in a considerate manner are **EXPECTED**. Students are expected to interact with one another in accord with the “Golden Rule” – that is, the principle of treating others as one would wish to be treated.

Laboratory Materials. **TAKE SPECIAL NOTICE!** No one, regardless of enrollment in BIOL 3702L, may EVER remove ANY materials from the laboratory without the EXPLICIT permission of Dr. Cooper. Doing so shall be the basis for disciplinary action.

### Laboratory Lecture Notes

Each laboratory session usually begins with a short lecture that provides an overview of the particular exercise being performed that day. For some of these sessions, the presentation will be given during lecture time by Dr. Cooper instead of during the laboratory period. Some presentations may be provided as video lectures posted on the course CONNECT subscription. When practical, these lectures will be made available as PDF copies of the PowerPoint slides on the laboratory web page. Please note the following: **Laboratory lecture notes are a privilege, not a right**. There is no requirement to provide laboratory lecture notes. At times, the notes may not be available until just prior to the laboratory session, so students should be sure to check their email periodically, especially before a laboratory session. *Also, students should consider the ecological impact of printing the laboratory lecture notes.*

### Laboratory Schedule

The laboratory components for this semester have been scheduled (see the composite Lecture/Laboratory Schedule posted in the “Files” section of the course CONNECT subscription or the Laboratory Schedule on the laboratory web page: <http://crcooper01.people.ysu.edu/microlab>). Students are expected to be prepared by reading the exercise instructions and watching assigned videos prior to coming to their laboratory session.

This schedule presents all the activities that shall be attempted this semester. Due to unforeseen circumstances, this schedule and its associated documents may be amended at any time during the semester to meet the course objectives or difficulties encountered with materials.

Some activities are to be performed as individuals and some within groups. Laboratory instructors will assign individuals to different groups. When working in groups, each individual is expected to be actively engaged in the laboratory activity being performed and to participate in a collegial manner. The laboratory instructor will subjectively evaluate an individual's in-group behavior which becomes part of Laboratory Etiquette/Citizenship score (see below).

### Open Laboratory Sessions

Please note that students shall be required to return to an "open laboratory session" to continue work on certain exercises. Some, but not all, of the open laboratory periods will be monitored by a student assistant. If no laboratory instructor or assistant is present during open laboratory periods, students must exercise caution at all times and follow all safety rules (see Laboratory Safety Rules below). If an incident occurs during an open laboratory period and there is no instructor/assistant present, report it immediately to Dr. Cooper, the laboratory instructor, Mr. Joe Bielicki (Room 2022, in the hallway immediately behind the laboratory), and/or the Office of Environmental and Occupational Health and Safety (Room 2303) located across the hallway from the microbiology laboratory.

Finally, with regard to the open laboratory periods, please abide by the following:

- *Unless approval from the instructor is secured, students are not permitted laboratory access during those times when another BIOL 3702 laboratory session is in progress.*
- *In addition, students are NEVER permitted to enter the laboratory during sessions when BIOL 1560 are scheduled or when the schedule indicates that the laboratory is closed.*

### Laboratory Grade Components

General. The laboratory section of this course is worth 20% of the overall BIOL 3702 course grade, or 200 points. However, the grade components listed below comprise various opportunities to earn 300 points. The total number points earned by a student in BIOL 3702L will be normalized (proportionally converted) to represent 20% of the course grade, i.e., two-thirds of the number of points earned in this laboratory component will go towards a student's final course score/grade.

In addition, students need to review the relevant section of the Lecture Syllabus that describes the consequences to their overall course grade when an individual's laboratory performance does not reach a particular grade threshold.

Finally, giving a student a grade of incomplete ("I") for BIOL 3702L is problematic since the laboratory is a component the entire course. An "I" grade may be given to a student who has been doing satisfactory work in a course but, for reasons beyond the control of the student and deemed justifiable by the instructor, had not completed all requirements for a course when grades were submitted (see the *Undergraduate Bulletin*; <http://www.ysu.edu/ebulletin>).

Grade Components: The BIOL 3702L grade components are described below:

- *Safety Quiz:* This quiz, worth 15 points towards a student's overall laboratory grade, will cover those important safety items and rules as presented by the laboratory instructor. Please refer to the section entitled "Laboratory Safety Rules" below.

**IMPORTANT NOTE:** *Any student not scoring at least 12 points on the safety quiz shall not be permitted to participate in any laboratory activity. The student must repeat taking the quiz (a different version) until a minimum score of 12 or better is achieved.*

- *Quizzes*: Nine scheduled quizzes, worth 10 points each for a total of 90 points towards a student's overall laboratory grade, will cover the material provided in the laboratory instructions for the exercise(s) performed or to be performed that day/week.
- *Laboratory Reports*: These reports, worth a total of 100 points towards a student's overall laboratory grade, consist of report sheets provided in each exercise handout. Laboratory reports will be randomly chosen by the laboratory instructor for submission without prior announcement. Hence, students are strongly encouraged to keep their laboratory reports current. Unless otherwise noted by the laboratory instructor, laboratory reports will be due immediately at the beginning of the laboratory session when requested. Laboratory reports submitted after the time stated by the instructor shall not be accepted and a score of "0" shall be recorded.

***In addition, all report sheets must be submitted stapled together in the upper left-hand corner. Non- or improperly-stapled reports shall not be accepted and a score of "0" shall be recorded.***

- *Skills Tests*: These exercises, worth a total of 45 points towards the overall laboratory grade, are designed to assess a student's mastery of particular microbiological skills. The particular instructions for these Skill Tests shall be described in handouts provided as links in the laboratory web page. The Skill Tests to be performed this semester and their point values are as follows: Microscopy (5 points); Streak Plate (5 points); Gram Stain (5 points); and Bacterial Unknowns (30 points).
- *CONNECT Learn Smart Laboratory Exercises*: Students are to complete three Learn Smart Laboratory Exercise, each worth 10 points (a total of 30 points towards the overall laboratory grade). These dates that these exercises are open and closed have been scheduled (see <http://crcooper01.people.yzu.edu/microlab/>; see also composite Lecture/Laboratory Schedule posted in the "Files" section of the course CONNECT subscription). All exercises will be open at 8:00 AM on the stated date and close at 5:00 PM on the stated date. These exercises will incur a significant amount of effort on a student's part – about 1 to 1.5 hours each. Therefore, students should plan accordingly.

***Deadlines for these exercises are firm and will not be changed or extended upon a student's request.*** Partially completed exercises will earn partial credit. A missed exercise will incur a score of "0".

- *Laboratory Etiquette/Citizenship*: This grade element, worth a total of 20 points towards the overall laboratory grade, represents a subjective assessment by the laboratory instructor regarding a student's demeanor in the lab, including collegiality, ability to follow instructions, cooperation in keeping the lab neat and clean, etc.

**Bonus Points.** *There are no scheduled bonus points nor is there an inherent right for bonus points.* At the discretion of the laboratory instructor, bonus points *may* be made available. Students **MUST NOT** ask for bonus points or special projects to earn bonus points. In addition, bonus point opportunities are never able to be "made up". If a student misses them by being tardy, absent, or otherwise, the opportunity is gone.

**Grading Scale.** There is no actual letter grade given with BIOL 3702L. On a student's transcript, the letters 'NG' (meaning No Grade) shall appear. Do not take this as a negative; this means the laboratory is an integral part of the overall grade for the parent course, BIOL 3702.

## Potential Health Risks

The possibility of acquiring an infection from BIOL 3702L activities is extremely low. The standard microbial strains used in the laboratory are considered generally avirulent (i.e., unable to cause disease) to immune competent persons. In fact, in the 20 years that Dr. Cooper has taught this laboratory, no laboratory-acquired infections have been documented. Yet, that does not mean the risk of infection is non-existent. Despite the use of bacteria with low virulence potential, infections could occur under non-standard and/or inappropriate practices as well as to persons having particular underlying health conditions. Also, some exercises will expose students to unknown environmental isolates, which must be handled with care. Moreover, though the risk of physical injury is low, careless behavior by students can lead to cuts and burns, thereby possibly serving as sites for infection.

*It is incumbent upon all students to follow all safety precautions* (see Laboratory Safety Rules below). The risk of infection or injury rises when these precautions are not followed – not just to the particular student not following safety rules, but also that student’s peers in the laboratory. SPECIAL NOTE TO STUDENTS WITH KNOWN HEALTH CONDITIONS: If a student has a documented health condition that may make that person susceptible to infection (e.g., immune dysfunction, pregnancy, etc.), please PRIVATELY contact Dr. Cooper so that arrangements may be made to limit exposure to particular microbes.

## Laboratory Safety Rules

General Information. Before the first laboratory meeting, and along with the information detailed below, watch the following video from the Amoeba Sisters on General Lab Safety:



<https://www.youtube.com/watch?v=MEIXRLcC6RA>

The BIOL 3702L web page details important safety rules and waste disposal guidelines that must be followed by all students (<http://crcooper01.people.yosu.edu/microlab/lab-safety-rules.html>). Read these rules carefully. They will be reviewed at the first laboratory meeting and students must successfully pass the quiz that will be administered covering these rules.

Laboratory Waiver. After having read and understood the Laboratory Safety Rules, please read the Liability Waiver available at the following URL (and through the face page of the BIOL 3702L web site): <http://crcooper01.people.yosu.edu/microlab/3702L-release-form.pdf>. A signed hard copy of this waiver must be received no later than laboratory period during the week of January 21<sup>st</sup>. Failure to submit this waiver shall prohibit a student’s participation in any laboratory activities.

Laboratory Materials. No one, regardless of enrollment in BIOL 3702L, may EVER remove ANY materials from the laboratory without the EXPLICIT permission of Dr. Cooper. Doing so shall be the basis for disciplinary action.

**Distribution of Course Material** – See the Lecture Syllabus for details. The same policy applies to students enrolled in BIOL 3702L.

**On-Campus Resources** – See the Lecture Syllabus for details.

**Special Accommodations** – See the Lecture Syllabus for details.

**Non-Discrimination Policy** – See the Lecture Syllabus for details.

**Family Educational Rights and Privacy Act (FERPA)** – See the Lecture Syllabus for details.

**Mental Health Counseling** – See the Lecture Syllabus for details.

### **Laboratory Syllabus Acknowledgement**

Students are *required* to submit a Laboratory Syllabus Acknowledgement Statement (LSAS) to their laboratory instructor no later than laboratory period during the week of January 21<sup>st</sup>. Submission of this statement signifies that the student has reviewed this syllabus and understand all course requirements and policies.

Each student must submit the LSAS by email to their particular instructor, Ms. Wagner ([mwagner01@student.ysu.edu](mailto:mwagner01@student.ysu.edu)) or Ms. Sui ([lsui@ysu.edu](mailto:lsui@ysu.edu)), and by exactly following the instructions given below.

Subject Line [**must be used exactly as noted here**]:

**BIOL 3702L Laboratory Syllabus Acknowledgement – Spring 2020**

Message: [**must use this wording - copy and paste**]

**I hereby acknowledge that I have accessed and read this syllabus associated with my enrollment in BIOL 3702L.**

**In addition, with this email message, I agree with the following statements:**

- **I fully understand the policies set forth in this syllabus.**
- **I acknowledge and understand that my failure to abide by these policies may have significant academic consequences for which I am solely responsible.**
- **I acknowledge and agree that the content described by this syllabus can be changed at the discretion of the course instructor in order to meet the course objectives.**
- **My signature does not in any manner signify the waiver of any rights granted to me by the policies, rules, and regulations of Youngstown State University.**