TEXT:

OWL registration code: http://www.cengagebrain.com/course/4683557

Course Coordinator:
Olga Binyaminov   Olga.Binyaminov@qc.cuny.edu

Instructor:       Olga Binyaminov       Email: Olga.Binyaminov@qc.cuny.edu

Class Hours:      Tuesday 1:40pm-4:30 pm

Course description:

Introduction to a variety of basic biochemical methods including enzymology, colorimetry, and chromatography used to examine metabolic processes.

Prerequisite:

A grade of C or better in Chemistry 102.3 and 102.1; corequisite: Chemistry 103.3.

Course objectives:

This course provides an introduction to the use of chemical methods to measure and characterize biologically important molecules. After taking this course students should

- be familiar with biochemical techniques such as chromatography and spectrophotometry
- have experience in the extraction, resolution, and identification of biochemicals from biological samples
- understand how to use qualitative analytical techniques to resolve and characterize biologically important molecules such as proteins
- be able to use quantitative analytical techniques to measure quantities and concentrations of biochemicals
Grading

OWL / Connect Pre-Lab Assignment: 15%

Pre-lab assignment must be completed and submitted on owl / google classroom prior to the beginning of the class, as indicated by the due dates on the google classroom.

In addition you are expected to be familiar with the general topic of the lab that is going to be discussed.

Virtual (Connect) / Online Video (EdPuzzle) Labs : 40%

There are 2 types of labs to be done this semester:

   Virtual – Connect- labs are done without the presence of the instructor, and are set on the connect website (see below for registration information). These are labs that are done virtually, as if you are in the class doing the labs. It will be graded automatically and saved onto your gradebook.

   Online Videos – EdPuzzle – these are lab meetings through zoom, in which you will be shown a step by step or a video that shows the experiment. You will need to submit a written data (which you will be instructed as per what needs to be done), and / or solved problems pertain to the lab. It will be graded by me and edited to your gradebook.

OWL / Connect Post-Lab Assignment: 15%

Post-lab assignment must be completed and submitted on owl/connect after the lab is done and prior to next lab meeting.

Midterm and Final:  20%

These are not cumulative exams.

Midterm is given on **October 19, 2020 at 1:40pm** and will includes the experiments listed and done during weeks 1-6.

Final exam will be given during the last scheduled lab session, **December 7, 2020, at 1:40 pm**, and will include all labs preformed after the midterm, weeks 8-13.

Both exams are going to be an hour **long, online on OWL (cengage) and live on zoom, and will include basic concepts, techniques and objectives of the lab.**
experiments tested on. You must have the correct setup, as shown below, to be allowed to take the exam.

No makeup is given for missed midterm exam. If you miss one exam, your final exam score will be duplicated to replace the missed exam score.

Lab class participation in synchronous and asynchronous scheduled meetings: 10%

You will be graded on your class performance, and it is 10% of your lab grade. These 10% include your participation in online sessions and discussions.

Both the midterm and final must be taken live (on zoom) with the following setup to be done prior to exam.

Failure to do so will result in a zero on your exam.
Required tools and accounts:

- **Zoom account:**
  
  Go to cuny.zoom.us, and register for a free account.

  When joining a meeting, click on join a meeting tab, and enter the meeting ID above. Alternatively, you may use the following link:

  https://zoom.us/j/94098056304?pwd=TDe4VklUcjhQfl6SW1Gck0zbXlKZz09

  Meeting ID: **940 9805 6304**

  Passcode: **053753**

- **An active Queens College email account**

- **Cengage Owl account:**
  
  You will need a Cengage account for some of the pre and post assignments, as well as for midterm and final exam.

  Register to cengage.com. and enter the following code **E-26R65WKK78MTT** for your class. See guide for Cengage registration in google classroom.

- **Connect account**
  
  Connect (McGraw Hills) account is used for Virtual Labs and LearnSmart Asynchronous labs. You will also have some pre and post assignments posted on Connect, as listed on syllabus.

  To register, go to

  https://connect.mheducation.com/class/b-olga-fall-2020---cvsankar-1031-biochemistry-lab
Google Classroom Registration:

Go to gdrive.qc.cuny.edu

Login with your CAMS account (looks like jsmith100,) if you have forgotten your username or password- go here: camqs.cuny.edu).

(Accept terms and conditions if it's your first time logging in).

Go to Classroom.google.com, (Identify as a student).

Click the + button on the top right.

Add the course code. The code for this class is “ovlhc5m”

Troubleshooting-

After logging in, it won't let you add the class.

A: Sometimes it switches you back to your personal Google account if you have more than one logged in at a time. Open the account switcher by clicking on your initial or profile picture in the top right and enter your QC account.

If you do not know CAMS account/password, go to camqs.cuny.edu and click forgot Username or Password.

ONLINE ENVIRONMENT

Students should be seated at a table or desk in a quiet room. The video for the Zoom meeting should be on although it may be muted for short periods when appropriate. The mic to the Zoom meeting should be muted unless asking or answering a question in class. Students should not attend the Zoom lecture meeting while in bed, driving in a car, from a bus, or anywhere else that would not constitute a collegiate environment.
Recording a session

All sessions will be recorded, and shared on google classroom for your review. Please read and acknowledge the following disclaimer. You will be required to consent to this disclaimer during our first session, by typing “agree” in zoom chat.

“Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off (except during exams) and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.”

QUIZ AND EXAM SETUP

Note: During quizzes and exams, students will be required have two online devices, one of which has a functional camera. The device with a camera can be a smartphone. The camera device should join the Zoom meeting with video on, mic off, and be set up to the side of the student with the camera aimed towards the keyboard, hands, materials, and screen of the device the student is taking the exam on (please see image below). This requirement is essential to insure the identity and integrity of all students taking the online assessments. Communication with the instructor during quizzes and exams can be conducted via private online chat through the meeting platform (i.e. Zoom). Students may not search the internet or communicate with anyone else during assessments, personally or electronically, as this would constitute a violation of academic integrity.

REASONABLE ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Candidates with disabilities needing academic accommodation should: 1) register with and provide documentation to the Special Services Office, Frese Hall, Room 111; 2) bring a letter indicating the need for accommodation and what type. This should be done during the first week of class. For more information about services available to Queens College candidates, visit the website, or contact: Special Service Office; Director, Miriam Detres-Hickey, Frese Hall, Room 111; 718-997-5870 (Monday – Thursday 8:00 a.m. to 5:00 p.m. & Friday 8:00 a.m. to 4 pm.).
CUNY POLICY ON ACADEMIC INTEGRITY

Academic Dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension, and expulsion as provided at https://www.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/academic-integrity-policy/. Please read this document, paying careful attention to the sections on plagiarism and Internet plagiarism. If you are not sure how to cite work you have found on the internet, please review the APA Guidelines provided by the Purdue OWL.
Tentative Schedule:

The instructor can make changes to the syllabus and the students will be notified in writing of such changes.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lab Experiment</th>
<th>Source</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>September 1, 2020</td>
<td>Safety Video and Discussion</td>
<td>Zoom Live / Connect Virtual Lab</td>
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<td></td>
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<td>Lab Safety Virtual Lab</td>
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<td>Lab Skills Learn Smart</td>
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<td>2</td>
<td>September 8, 2020</td>
<td>Experiment 1: Spectrophotometer Fundamentals Learn Smart Part 1 and Part 2</td>
<td>Zoom Live / Connect Virtual Lab</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Part 1 and Part 2</td>
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<td></td>
<td>(Lab Manual Pre Lab)</td>
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<td></td>
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<td></td>
<td>(Lab Manual Post Lab)</td>
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<tr>
<td>3</td>
<td>September 15, 2020</td>
<td>Experiment 10: Carbohydrate Determination Virtual Labs: Test for sugars and Test for starch</td>
<td>Zoom Live / Connect Virtual Labs</td>
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<td>OWL Pre lab</td>
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<td>OWL Post Lab</td>
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<tr>
<td>4</td>
<td>September 22, 2020</td>
<td>Experiment 2: Vegetable Carotene Extraction</td>
<td>Zoom Live / EdPuzzle Video</td>
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<td>Lab Manual Pre lab</td>
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<td>Lab Manual Post Lab</td>
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<tr>
<td>5</td>
<td>October 6, 2020</td>
<td>Experiment 7: acid base properties of Amino Acids</td>
<td>Zoom Live / EdPuzzle</td>
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<td>OWL Pre lab</td>
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<td>OWL Post Lab</td>
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<tr>
<td>6</td>
<td>October 13, 2020</td>
<td>Experiment 8: Vitamin C</td>
<td>Zoom Live / EdPuzzle</td>
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<td>Lab Manual Pre lab</td>
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<td>Lab Manual Post Lab</td>
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<tr>
<td>7</td>
<td>October 20, 2020</td>
<td><strong>Midterm Exam</strong>&lt;br&gt;Must be live on Zoom</td>
<td>Labs 1, 10, 2, 7 and 8</td>
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<td></td>
<td>1 hour long, OWL</td>
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# Tentative Lecture Schedule for Chemistry 103.1, Section 02, FALL 2020

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Title</th>
<th>Additional Information</th>
</tr>
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<tbody>
<tr>
<td>8</td>
<td>October 27, 2020</td>
<td>Enzyme Kinetics part 1 and 2 Enzymes – Concentration and Activity</td>
<td>Connect Virtual Labs OWL Pre Lab</td>
</tr>
<tr>
<td>9</td>
<td>November 3, 2020</td>
<td>Enzyme Kinetics part 3 and 4 Enzymes – Temperature and pH</td>
<td>Connect Virtual Labs OWL Post Lab</td>
</tr>
<tr>
<td>11</td>
<td>November 17, 2020</td>
<td>Experiment 9: Cell Respiration Virtual Lab Connect -</td>
<td>Connect Virtual Lab OWL Pre Lab Lab Manual Post Lab</td>
</tr>
<tr>
<td>12</td>
<td>November 24, 2020</td>
<td>Experiment 4: Thin Layer Chromatography</td>
<td>Zoom Live OWL Pre Lab (Due July 30) OWL Post Lab (Due August 3)</td>
</tr>
<tr>
<td>13</td>
<td>December 1, 2020</td>
<td>Experiment 3: Size Exclusion Chromatography</td>
<td>Zoom Live Lab Manual Pre Lab (Due August 3) Lab Manual Post Lab (Due August 4)</td>
</tr>
<tr>
<td>14</td>
<td>December 8, 2020</td>
<td><strong>Final Exam</strong> Must be live on Zoom</td>
<td>Experiments 5, 6, 9, 4 and 3 1 hour long, OWL</td>
</tr>
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### Important Dates:

- September 7 is a Labor Day – No Classes
- September 18-20 - No Classes
- September 28 - No Classes
- September 29 – Tuesday with Monday schedule.
- Oct 12 – Columbus Day – No Classes
- October 14 – Wednesday with Monday Schedule
- November 25 – Wednesday with Friday Schedule
- November 26-November 29 – Thanksgiving break - No Classes
- December 9 Last day of classes