Course Description
This course will expose students to the fascinating worlds of modern medicine, biological sciences and public health through the lens of COVID-19 (Corona Virus Infectious Disease 2019). They will recognize that their knowledge of scientific underpinnings (biology, chemistry and physics) are required to understand the pathogenesis of COVID-19. They will learn that the application of basic science knowledge drives the development of new treatments and therapeutics. Learning the basics of epidemiology will empower them to educate others in how to prevent the spread of COVID-19. Perhaps most important, students will recognize that “teams” of individuals from many areas of science and medicine are required to ameliorate, stop and prevent the devastating effects of this pandemic. As we all work together in this course, students will build upon their skills in life-long learning, skills that will allow them to continue to learn about COVID-19 as our knowledge base evolves. Experts in basic science, medicine, nursing, public health, global health and allied health practices will engage with students on the latest advances in their fields. Students will learn from clinical and scientific faculty who train UVM medical students in the Larner College of Medicine, known for being one of the most competitive and successful medical schools in the country. This course will help students discover their interests, learn about the latest advances in bioscience and molecular medicine, and develop an understanding of diverse medical and health science career paths that might be right for them.

Course Learning Objectives
• Recognize the complexity of the constantly evolving world of health, science & medicine.
• Demonstrate an ability to search the literature for authenticated material on a given topic.
• Construct a vocabulary required to analyze, discuss and question the current scientific, medical and epidemiological knowledge pertaining to COVID-19.
• Engage in thought-provoking discussions with guest speakers, classmates, teaching assistants, and instructors using active learning techniques (flipped classrooms and team based learning).
• Recognize the importance of working in teams to solve problems and effect change.
• Develop effective team-building and teamwork skills.
• Practice critical reading, writing and presentation skills in the context of an evolving area of science and medicine.
• Identify career paths of interest within health & medicine, and further explore the required education and experience necessary to set those career paths in motion.

Course Directors
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Course Websites for Synchronous and Asynchronous Learning
This course’s main website will be run through Blackboard. Blackboard will be used primarily for the following: Course announcements, basic course information including the syllabus, daily preparatory material, grades, assignments, and discussion forums. Blackboard provides all the information required for asynchronous learning.

The synchronous learning sessions (10 AM – Noon EDT) will be run through Zoom using a designated URL. Most synchronous sessions will have required preparatory material, posted on Blackboard, which must be completed by 10 AM, i.e. prior to the session for which it was assigned. Appropriate and timely session preparation is critical to your success in the course. (Please see Assessments and Grading below.)

Preparatory Materials will be provided on Blackboard.

Attendance Policy:
During synchronous instruction, students are expected to attend a virtual session via Zoom using the provided URL. PLEASE BE LOGGED IN and READY TO GO AT 10 AM. All large group sessions WILL BE recorded. Some days we will leave the large group and work in small groups with an assigned mentor. Small group activities WILL NOT BE recorded.

If you are ill or have an emergency situation that forces you to miss any class, please contact either one of the course directors. Should you miss a class, it is your responsibility to a) do the preparatory work, b) listen to the session recording, if available, c) make up a Readiness quiz, if one was given, and d) make up any small-group work that was completed during the session.

Small Group Assignments:
You will be assigned to a small group (5 – 7 members) each week. Each small group will be assigned to a “break-out” room (URL posted on Blackboard) to which a mentor will be assigned. Small groups will be used in Team-based Learning as well as other activities that require group work. Each day the assigned mentor will select a Team Leader from the student group. A Team Leader has the responsibility of representing the entire group, when necessary. The use of “break-out” rooms is advantageous because they can be easily eliminated to facilitate large group learning, and quickly reformed to return to small group learning.

Learning Modalities:
Readiness Quizzes
Many of our sessions will have preparatory materials (readings or videos) posted in BB for your review. These sessions will begin with a Readiness Quiz -- 5-10 multiple-choice questions – testing key concepts from the preparatory material that are essential for your learning during that session. You will have 60-90 seconds to answer each question using an appropriate response system. We expect that you will answer the questions without consulting any materials. At the end of the quiz, we will review those questions with which students struggle. Your lowest RQ score will NOT be used in calculating your Readiness Quiz grade.

Team-based Learning (TBL)
For each TBL, preparatory materials will be posted for your review prior to the session. Each TBL will begin with an Individual Readiness Assessment Test (iRAT). iRATs will have 5 – 10 multiple choice questions and you will have 60-90 seconds to answer each question. Like an RQ, the iRAT will be delivered using iClic Reef and we expect that you will answer the questions without consulting any materials. After completing the iRAT, you will join your group in an assigned breakout room where you will work together to answer the same questions as a team – gRAT (group Readiness Assessment Test). The appointed Team Leader will be responsible for submitting the group’s answer to the question. If CORRECT! appears, you can move on to the next question. If not, you need to try again. Each subsequent attempt to answer the
question reduces your score for that question. Your TBL grade is the average of your iRAT score and the team’s gRAT score.

**Participation & Preparation**

This summer we will be using “clickers” for our daily assessment of your participation and preparation. Students will use a mobile device or a web browser with the software available during all sessions. We will randomly integrate clicker questions throughout our sessions to allow us to measure your understanding of the material and encourage your interactivity. You will earn one point for submitting a response with your clicker (participation), and a second point for answering the question correctly (preparation). These points constitute 7% of your course grade (see “Assessment & Grades” section below.) Note that you do NOT have to answer every question correctly to obtain all the available points in this section of the course. The scoring is tiered as shown below:

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<th>% of available points earned</th>
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<tr>
<td>80-100</td>
<td>7</td>
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<td>70-79.9</td>
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<td>60-69.9</td>
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<td>0-29.9</td>
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**Weekly Reflections:** What was done last year; will be modified to reflect an updated syllabus

**Week 1:**
A) In 500 words or less, describe why you elected to take this course and what you hope to learn.

B) This week you have been exposed to a number of different careers and heard about many different paths that individuals took to get there. Select one career you heard about in this week and describe why that career would be a good choice for you. We expect that you will identify traits you have that would make that a good career for you. Next, describe how you could investigate this career further. (500 words or less)

**Week 2:** This week you were exposed to epidemiology and public health through the lens of COVID-19. Please reflect on which of those topic areas you found most interesting and why. Since both areas are quite broad, explain what about the one you chose would you like to investigate further, and how you will go about doing that. (500 words or less)

**Week 3:** Friday morning you heard incredible presentations from your colleagues. Reflect on one that piqued your curiosity. Describe the topic...explain why it piqued your curiosity and describe what you’re going to do about it.

**Week 4:** Please reflect on what you will remember most from this course and why it impacted you so much. Also, please tell us if the course met your expectations. Why or why not? (750 words or less)

**Assignment Policy**

You are held to the University’s Code of Academic Integrity (accessible here: https://www.uvm.edu/policies/student/acadintegrity.pdf). There is a zero tolerance policy for any kind of cheating or plagiarism.
Assignments must be submitted electronically to Blackboard only. Most assignments will be due at 9 AM EDT on the day specified in the syllabus. Unless prior approval has been granted by one of the course directors, late assignments will have points deducted as follows:

- <6 hr late: Less 10 percentage points
- 6-12 hrs late: Less 20 percentage points
- 12-18 hrs late: Less 30 percentage points
- >18 hrs late: No credit

Please plan accordingly. It is recommended that you upload your assignment to Blackboard at least 1 hour before it is due to ensure you have sufficient time in case of technical difficulties.

**Our Course Expectations**

Each student is expected to:

- Actively and thoughtfully participate in class discussions.
- Treat others in the class with respect and dignity.
- Complete assigned reading materials prior to class.
- Turn in assignments on time.
- Seek out assistance from TAs, faculty, and classmates when needed.
- Behave with academic honesty and integrity.
- Be logged onto all synchronous class sessions on time.
- **Take advantage of this opportunity to learn as much as you can!**

**Assessments & Grading**

*Readiness and Team-based Learning Quizzes* 50%

On 11 different occasions you will be assessed with a Readiness Quiz or Team-based Learning test prior to the start of the session.

*Worksheets* 30%

On 10 different occasions you will be required to complete worksheets assessing your understanding of the material, either during or subsequent to the session.

*Reflections* 10%

A reflection will be assigned weekly as detailed above.

*Presentation* 3%

You will prepare and give a 10’ presentation on Friday, July 17th that discusses a “new” finding related to the COVID-19 pandemic, i.e. one which was identified after the course began.

*Participation & Preparation* 7%

A yet to be identified “clicker” system will be used for our daily assessment of student’s participation and preparation as detailed above.

**Religious Holidays**

Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time.
Academic Integrity
The policy addresses plagiarism, fabrication, collusion, and cheating: cheating:
www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf