Possible Online Modules	Time	Description
Master Teacher Classroom Teaching (UT only–Canvas--Contact Misty Bailey to be added)	8 hrs	**Who should take this Course:** Anyone who is looking for a foundation or refresher on preclinical teaching! Although the course is directed at relatively new instructors, the material can be beneficial to anyone who will be teaching in a veterinary curriculum, technician program, or continuing education program. Also, while we recognize there are many laboratory, small group and clinical instructional activities at the CVM, this course is focused on classroom teaching and includes the core elements we'd love all veterinary instructors to master. Overall Goals for Participants: Participants will gain the skills and resources to carry out basic instruction in a veterinary classroom setting, including developing learning outcomes, effective lectures and appropriate written assessments.
Mindfulness-Based Stress Reduction (contact Dr. Elizabeth Strand to be added)	2 wks	The program was designed to help human patients who were not responding to other forms of medical treatment. MBSR has now spread to multiple populations including health professionals and medical and nursing students as well as in multiple settings including work places, educational settings and even prisons. UT VSW is the first to offer this class at a veterinary teaching institution. This particular course will be managed through Palouse Mindfulness and facilitated by Dr. Elizabeth Strand and other faculty facilitators.
VIN--Virtual Clinic, Rounds, Exero Vet (https://www.vin.com/)	Varies	Virtual Clinic: Patients are accessed from a virtual waiting room. Students practice and test their clinical skills in a risk-free environment. Allows students to challenge themselves and learn from their mistakes with no real-life consequences. A virtual mentor provides feedback, and the clinic records results with each patient so students can track their progress. There are 20 patients representing several different clinical challenges, including congestive heart failure, acute hemorrhage, suspected hyperadrenocorticism, lymphoma, and amphetamine toxicosis. With Dr. Zenny Ng's guidance, Misty Bailey has an assignment based on a clinical education article. Happy to share! An abundance of videos, textbooks, rounds, etc. on almost any subject. There is also a 3D anatomy program and Exero Vet, a database of skills videos prepared by veterinary colleges. Best way to find something is to use the search box. If you can't find what you need, contact Misty Bailey to help and/or reach out to VIN on your behalf.
VICE (Veterinary Isolated Clinical Education) Rounds https://www.youtube.com/channel/UClQbhJjqT_KPD2rv5j82iFQ	Varies	VICE Rounds is a volunteer crowd-sourced continuing education channel created to allow clinical veterinary student education to continue while students are unable to be physically on campus. It was created by veterinary educators at the University of Florida in response to COVID-19. If you would like to upload a VICE Rounds of your own for sharing, contact Alex Fox-Alvarez at VICE.Rounds@gmail.com. Videos so far: Hypercalcemia of Malignancy, Brachycephalic Airway Syndrome, PU/PD, Anesthesia and Pain Management, Treatments of Common Parasites SA. Worksheets are available for each presentation to facilitate student learning. Reach out to Misty for more information about worksheets, etc.
Large Animal Consulting & Education (https://largeanimalce.com/)	Varies	Each session provides 1 hour of RACE-approved CE for veterinarians. Credit is given after a 5-question quiz. Sample sessions are Anthelmintic Drug Selection & Use, Field Intervention for Scouring Calves, Local Anesthetic Techniques in Ruminants, Retained Fetal Membranes, etc. Each session has a cost.
VetGirl (vetgirlontherun.com)	Varies	A subscription-based multimedia service offering RACE-approved, online CE for veterinary professionals. Has a free trial. Most disciplines are covered. On-demand real-life rounds, Webinars, and videos. Talk to Misty Bailey about getting faculty enrolled.
University of Wisconsin (https://ce.vetmed.wisc.edu/courses)	Varies	From cardiology to oncology to exotics to emergency and critical care. Fee-based.

Swine Online (Iowa State's Swine Medicine Education Center)	2 wks	Self-directed online course with 14 core lectures. A UT faculty facilitator is available for questions and assistance. Contains 20+ short video virtual tours of things like a sow farm, boar stud, nursery facility, vaccination best practices, etc. Contains a mid-term and final. Essential for anyone thinking of swine practice or mixed animal practice. Starts April 13, requires live participation online.
Arthritis Case Management	1 cr hr	Provided by Dr. Darryl Millis. Designed to help identify dogs with osteoarthritis earlier to allow treatment designed to improve clinical function and quality of life. Embraces team approach (veterinarians, technicians, owners) to multimodal treatment of arthritis and provides an evidence-based approach to treatment options. Participants will understand basic pathophysiology of osteoarthritis, common conditions causing osteoarthritis, examination of the arthritic patient, and the various treatment options for osteoarthritis and their application to clinical patients.
Center for Educational Technologies @ Texas A&M University's CVM	Varies	Free content includes instructional videos, core surgical skills modules, SA hematology case studies, blood smear evaluation and erthryocyte morphology, SA dentistry, dermatology, cardiology, physiology. Content is interactive and contains assessments. A faculty/staff preview link is available from Misty Bailey. Free access through December 31, 2020.
RECOVER	1 cr hr (combined)	Basic life support (5 hrs) and advanced life support (3.5 hrs) courses to students of accredited veterinary programs. Misty Bailey has set up a college account & can provide a code. After 4/17, students receive a 30% discount (free enrollment ended).
VetFolio (https://www.vetfolio.com/pages/trial-page)	Varies	618 different topics vary from anesthesia to anaphylaxis to avian head trauma and aural hematoma to fear-free.
Aquifer (https://aquifer.org)		Virtual cases about core HUMAN clinical conditions to fill gaps in clinical training. Family medicine, internal medicine, geriatrics, pediatrics, radiology, surgery. *If anyone wishes to use this, we must request college access. Contact Misty Bailey.*
University of Minnesota Distance Learning Resources (https://docs.google.com/document/d/1Xrd1E_mb7qz11YEsuRV7etNQjWP-A-UuVcE93yQ0glw/edit#)	Varies	Small animal clinical skills with embedded videos, bovine lameness, theriogenology case studies, preventive medicine, large animal surgery, food/fiber surgery, applied GI physiology.
Frontline CE Portal (https://ce.frontlinebrandclinic.com/)	Varies	Talking it O.V.E.R. with pet owners (1 hr), Flea control (1.5 hrs), Tick control (1.5 hrs), The INs and OUTs of flea & tick control for cats (1 hr)
Heartgard Clinic CE (https://ce.heartgardclinic.com/)	Varies	What do you believe? (Heartworm disease prevention--1.5 hrs), Learn to be heard: Getting pet owners to listen (1 hr), Hookworms and roundworms: A look INSIDE & how to get the message OUT (1 hr), Heartworms exposed: Revealing the reality and risks of heartworm disease (1 hr)

Merial/Boehringer Ingelheim (https://vaccineceseries.com/)	Varies	Immunology & vaccination (1 hr), leptospirosis (1 hr), canine core vaccines (1 hr), lyme vaccines (1 hr), rabies (1 hr), feline vaccines (1 hr), injection site sarcomas (1 hr), canine infectious respiratory disease complex (.5 hr), Let's talk lifestyle vaccines: Having the conversation with pet owners (1 hr)--Must have sign-in; For account number and license number, enter 0000
NIH Online Clinical Research Training (https://ocr.od.nih.gov/courses/ippcr.html)	1 cr hr each	**Introduction to the Principles and Practice of Clinical Research (IPPCR)** –1 cr hr–is a free online course that trains registrants on how to conduct clinical research effectively and safely. **Principles of Clinical Pharmacology (PCP**)–1 cr hr– is a free online lecture series covering the fundamentals of clinical pharmacology as a translational scientific discipline focused on rational drug development and utilization in therapeutics.
Fear Free Pets https://fearfreepets.com/fear-free-student-and-faculty-application/	9 hrs	This completely online course focuses on reducing and alleviating fear, anxiety and stress in pets during veterinary visits. By incorporating the emotional wellbeing of pets in addition to their physical wellbeing, you will be able to reduce or remove anxiety triggers that can cause pets to become fearful at home, in transport, and at the veterinary hospital; help owners deliver calm pets to your hospital; enhance the quality of medicine in your practice; increase client compliance; and improve safety for the veterinary team. Fear Free offers all students, faculty, and staff at veterinary schools and veterinary teaching hospitals complimentary membership to this program. Complete the application in the link provided and follow the steps in the email sent to you to register. Additional courses can be taken after completion of the Veterinary Certification Program found in the "additional courses" tab. Email wags@fearfreepets.com for support. Additional CE available once registered!
American Association of Equine Practitioners	Varies	Clinical care core concepts for new graduates from 2018 and 2019 annual conventions. Approximately 50 options. **To see content:** https://mcusercontent.com/098934c9131c3fad1fa75df6c/files/b42a4557-3e3f-43c4-a475-40c8d11486ac/AAEP_Convention_Core_Concept_Sessions_2018_2019.pdf?utm_source=Academia+List&utm_campaign=a43b6d2258-COVID-19+Advice+for+Client+Interactions_COPY_01&utm_medium=email&utm_term=0_b10b3b89f4-a43b6d2258-42566017. **Student Education Community**: https://aaep.org/student-education-community Faculty and students may use **code vetstudent** until June 1 (click Add Access Code). **Convention recordings 2012–2019:** https://aaep.digitellinc.com/aaep/login
Virginia Tech Dog (v1.0): github.com/VTUL/vt-vr-dog Cow (v0.1): github.com/VTUL/vt-vr-cow		Virtual reality anatomy of the dog and cow (working prototypes). No cost, interactive, three dimensional. Open source license. Guidelines are found here: https://guides.lib.vt.edu/vetmed/vranatomy. Faculty who wish to use the software are asked to complete this form: forms.gle/G4rzuAnoNcoHmptP6.
Zoetis Learn (https://learn.zoetisus.com/pages/90/all-catalogs)	Varies	Beef, canine, dairy, equine, feline, and diagnostic modules.

IDEXX Learning Center (https://www.idexxlearningcenter.com/)	Varies	Can search by length. Fecal diagnostics, reticulocytes, CBC, etc.
AABP (http://bcionlinece.org/AABPModules & https://ksubci.org/resources-for-students/)	Varies	Conference sessions from 2014 to 2017 @ bcionlinece AABP AVC Cases @ ksubci. Go to Resources for Students menu. Search by title and presenter. Down cow, diarrhea cases available.
VetMedTeam (https://www.vetmedteam.com/home.aspx)	Varies	Interactive and RACE-approved options. Shelter Medicine, case study investigations, mange, anemia, intervertebral disc disease, CPR for the Veterinary Soul, When Caring Hurts: Managing Compassion Fatigue, Confronting the Stigma of Suicide: Shining Light on a Dark Subject, Ethics Exhaustion: When Your Sense of Right is Wronged, etc.
American Animal Hospital Association–AAHA (https://www.aaha.org/education/online-training/aaha-learning/)	4-10 hrs	Hospice and palliative care, euthanasia, diabetes, radiation safety
Clinician's Brief (https://www.cliniciansbrief.com/ & https://www.cliniciansbrief.com/veterinary-team-brief)	1-3 hrs	Puppy care, chronic kidney disease staging and considerations, nutritional clinical case series, antibiotic use, joint health, managing stress and burnout
AVMA (https://axon.avma.org/ & https://www.avma.org/resources/wellbeing/qpr-suicide-prevention-training)	Varies	AVMA Convention & Events CE; Career Development; One Health; Policy & Practice; Wellbeing, Diversity, & Inclusion; Leadership (free to members, $75 to non-members) @ axon.avma.org; AVMA QPR Suicide Prevention Training @ avma.org
Equinosis (https://equinosis.myshopify.com/pages/tech-training-lltouch)		Lameness locator: Training in the use of the Lameness Locator and interpreting lameness; Other self-paced learning
International Society of Equine Locomotor Pathology (https://www.iselp.org/about/iselp-tv-on-demand/)	1.5 - 2 hrs	Temporarily free access to online lectures - link is for 2019 ISELP Sports Medicine & Rehabilitation Module. Tendon and ligament injury, analysis of gymnastic exercises
Partners for Healthy Pets (https://www.partnersforhealthypets.org/course_overview.aspx)	Up to 9 hrs	Preventive healthcare, preventive healthcare plans, internet marketing and social media, communication skills, feline-friendly practice
International Veterinary Information Service (IVIS-- https://www.ivis.org/home.asp)		Courses from Royal Veterinary College, Massey University, and the University of Sydney.

American Consortium for Small Ruminant Parasite Control (https://www.wormx.info)		Online FAMACHA© Certification, dewormers, genetics, alternatives for anthelmintic resistance, copper oxice wire particles, fecal egg counting
Cornell Veterinary Neuroanatomy and Clinical Neurology (http://www.neurovideos.vet.cornell.edu/)		Veterinary Neuroanatomy and Clinical Neurology videos to coincide with the fourth edition of the book
British Equine Veterinary Association (https://www.beva.org.uk/Home/Join-BEVA/Join-BEVA & https://www.beva.org.uk/CPD-and-Careers/Webinars)		Free membership until June 30--variety of webinars for equine practice. Examples: aborting mare, FWEC, drugs and the sport horse, etc.
VetMedAcademy (https://vetmedacademy.org/course-grid)	Varies	Cardiovascular mechanics, renal concepts, clinical pharmacology, antiparasitic resistance, endocrine concepts, zoonoses, etc.
Veterinary Dental Company (https://www.theveterinarydentalcompany.com)	1 cr hr	Equine dentistry free online training for those impacted by COVID-19. Contains 10 introductory lectures with a multiple choice quiz at the completion of each lecture, plus 2 bonus lectures. Contact Misty Bailey to get a coupon code good for 60 days. Free through the end of 2020.
American College of Veterinary Sports Medicine and Rehabilitation		ACVSMR--1-hour webinars **Apr. 27**, 7 to 8:30 p.m.--Dr. Tara Edwards, Mobility Examination in the Canine **Apr. 29**, 7 to 8:30 p.m.--Dr. Cooper Williams & Dr. Phillippe Benoit, Horse Lameness--From the Stifle to the Foot Email student.contact@vsmr.org to get a webinar invite; Registration max=75 participants
Hill's Global Symposium (https://hillsglobalsymposium.com/)	Varies	**Apr 20 & 21**--Live stream sign-up available. Fulfills 12 hours of CE if all sessions attended.
UC Davis (https://www.youtube.com/user/UCDVetMed/videos)	8 hrs	**Tuesday, May 12**. Equine Pathology seminar. Tuition is $50 for RACE credit. Lectures posted to YouTube channel on May 13 for student credit without a fee. Topics: Pathology of the nervous system, Musculoskeletal injuries of race horses, Pathology of the alimentary system, Ocular pathology (Registration: https://us02web.zoom.us/webinar/register/WN_mvncxu-qR02ZqsGuyUqRzA)
Carolina Distance Learning (https://www.carolinadistancelearning.com/)		Lab kits for home learning. Includes biology, microbiology, hematocrit, chromatography, etc.
Journal of Visualized Experiments (https://www.jove.com/journal)		Thousands of videos of experiments. Includes information on how to move a lab course online and how to link JoVE to Canvas.

Darthmouth (https://sites.dartmouth.edu/teachremote/resources/remote-lab-activities-and-		Remote lab activities and experiences. Contains a list of a variety of resources, including MERLOT, which includes bacteria sampling, gel electrophoresis, biostatistics, PCR, bacterial identification, etc.
Merck Animal Health Facebook Live Event (https://www.facebook.com/merckanimalhealth/?eid=ARCP6Sq96VzDGfbPOnVYyO70gxX7j4DKQPhdc0KF9J7acSovTJgvT0hwAsLJ6Fg3LQZCtLpzBzlSyAB4)		Apr 23, 1 p.m. (Dr. Elizabeth Strand, COVID-19 & Vet Wellbeing), Apr 30, 1 p.m. (Dr. Matthew Salois, Economic Impact of COVID-19), & May 7, 1 p.m. (COVID-19: Grief & Gratitude).
University of Illinois (https://online.vetmed.illinois.edu/Courses-For-Veterinary-Students) Contact Misty Bailey to be added		
Clinical Small Animal Dentistry	2 cr hrs	Asynchronous. Initially develop by Dr. Sandra Manfra DVM, DACVS, DACVD, a past president of the American College of Veterinary Dentistry, and significantly updated in 2018, this course highlights clinically relevant dental and paradental anatomy in the recognition and treatment of dental disease. Dental pathology, radiology, extraction technique, and periodontal disease are applied in a clinical model. $35/student.
Infectious Disease Management in Livestock Systems	1 cr hr	Asynchronous. This course will allow students to understand the interaction between animals (hosts), microorganisms (infectious disease), and the environment. Students will learn how to improve the health of livestock systems and apply economically effective interventions to control infectious disease. Livestock farms serve as a framework for the discussion of these broadly applicable principles, including the management of pandemics. $100/student; enrollment ends Jan. 21, 2021.
Introduction to Livestock Business Strategy	1 cr hr	Asynchronous. This course provides students with basic business strategy concepts adapted to the livestock production industry. Students will learn to analyze the internal and external environment, set performance measures, and create strategies to compete in the livestock industry. $100/student
Veterinary Imaging Anatomy	1 cr hr	Asynchronous. This course complements conventional anatomy courses with practical applications using radiographs. Students gain experience identifying normal clinically relevant anatomical structures on a radiograph and learn how a tissue's structural composition impacts the generation of images using various imaging modalities. Cardiovascular, respiratory, neurological, musculoskeletal body systems, and abdominal organ anatomy are covered. $100/student; enrollment ends Jan. 21, 2021.

Clinical Diagnostic Imaging	2 cr hrs	Asynchronous. In this diagnostic imaging course for clinical year veterinary students, a team of board-certified radiologists, cardiologists, surgeons, neurologists and other specialists will teach learners to integrate radiographic findings with patient signalment, history and presentation from the comfort of their own home. This course is heavily case-based -- just like a face-to-face clinical rotation -- and uses over 40 imaging cases selected by board-certified radiologists, to ensure learners are prepared to interpret and diagnose the most common diseases presenting to an entry-level small animal veterinarian. The important fundamentals of radiography are reviewed, including principles behind imaging modalities, high-quality image acquisition and radiation safety. Specialists also present the critical aspects of radiology, including image interpretation, differential list generation and diagnosis using the curated library of clinical cases. All body systems are covered, including musculoskeletal, cardiovascular, respiratory, gastrointestinal, renal, and hepatic, in addition to others. Radiographs are most heavily used in the clinical cases; however, students are exposed to other modalities including ultrasound, CT and MRI. What You'll Learn: Take high-quality diagnostic radiographs; Identify the safety concerns surrounding medical image acquisition; Identify normal and abnormal clinically-relevant anatomical structures on a radiograph; Appreciate the breadth of normal anatomical variants in veterinary radiographs; Integrate radiographic findings with patient signalment, history and presentation; Diagnose common small animal diseases from radiographs; Become familiar with reviewing a formal radiology report; Compare and contrast different imaging modalities as they relate to clinical cases. $200/student; enrollment ends Jan. 21, 2021.
Interpretation of Laboratory Data	1 cr hr	A case-based approach to clinical laboratory data. Students are required to critically evaluate clinical case data, and write a summary of the case to include description of abnormalities and pathophysiology causing the changes, differential diagnoses and additional testing. A review of each case will be presented once you submit your write up. You are expected to work 4-6 hours per day for 5 days and finish this course in one week. $100/student; enrollment ends Jan. 21, 2021
Coursera (create free Enterprise account): https://www.coursera.org/		
Contact Misty Bailey to have a student added to a Coursera course!		
Chicken Behaviour and Welfare	10 hrs	This course explains the general principles of chicken behaviour and welfare, and the behavioural and physiological indicators that can be used to assess welfare in chickens kept in hobby flocks through to commercial farms. The focus is primarily on laying hens and meat chickens (broilers) although many of the principles are relevant to other types of poultry. The course is likely to be of interest to people who own chickens as pets or keep a small hobby flock, commercial egg and chicken meat producers, veterinarians and vet nurses. Learning Objectives: at the end of this course, you will be able to - - Describe avian sensory perception and motivation - Explain the main behaviour patterns of poultry - Define welfare and explain the bases of welfare standards - Assess chicken welfare, using behavioural and physiological means - Understand common welfare problems of chickens This course is taught by staff from Scotland's Rural College (SRUC), University of Glasgow, and St David's Poultry Team.

Sustainable Food Production Through Livestock Health Management	18 hrs	Learn about the impact of infectious disease on sustainable animal-based food production by understanding the science of growth, immunity, and infection and by learning the problem-solving skills needed to advance animal health and food production through optimal management practices. There is a growing global need in agricultural production for a workforce that is capable of integrating knowledge of animal health and production with an understanding of consumer preferences in the context of economic reality, business efficiency, and ethical constraint. However, current evidence suggests that there is a growing shortage of people with the knowledge and problem-solving skills required to match the rapid advances being made in animal health, science, and food production. The results of this shortage are wide-ranging and could lead to challenges in food security and agricultural economic competitiveness in some countries. In this course we will explore the effect of infectious disease on sustainable animal-based food production. The content and learning outcomes of this new course will be designed to be relevant across different food production sectors (i.e., beef, dairy, poultry, and pigs). While the instructors will provide the participants with a strong scientific base for understanding the impact of infectious disease in animal-based food production, the emphasis of the material will be on practical problem-solving and will be directed towards equipping participants with a platform for developing the skills needed to contribute to sustainable food production.
Equine Welfare and Management	17 hrs	This unique course was developed by veterinarians at the world-renowned University of California, Davis School of Veterinary Medicine. The course will address horsemanship from a welfare perspective, within the context of “The Five Freedoms” of animal welfare. We’ll explore equine physiology, behavior and basic needs including housing, nutrition, hygiene and disease management. You’ll learn how to perform basic tasks to assess the overall condition of the horse and identify problem areas. We’ll also examine the specialized needs of the equine athlete and the major responsibilities we as owners, handlers or competitors must assume in order to ensure the health and welfare of our equine companions. Finally, we’ll look several special topics in equine welfare including disaster planning and the international welfare efforts now in place to protect working horses and other equids in key industries such as racing, international competition, tourism and even mining. By the conclusion of the course, you will be well equipped to develop a comprehensive welfare plan for any horses in your care.

Global Health at the Human-Animal-Ecosystem Interface	29 hrs	The University of Geneva, Institute Pasteur, University of Montreal and Centre Virchow-Villermé/University Paris Descartes welcome you to this MOOC on "Global Health at the Human-Animal-Ecosystem Interface"! You will explore and learn about some of the major and current Global Health Challenges at the Human-Animal-Ecosystem Interface: zoonotic emerging infections (e.g. Ebola, Nipah, MERS, Avian Influenza), antimicrobial resistance, neglected tropical diseases (e.g. rabies, leishmaniasis, zoonotic TB), snakebite and other human-animal conflicts etc. You will learn new concepts from the field of epidemiology, social anthropology, disease ecology, veterinary sciences, global health policy etc. and approaches such as One Health, Eco-Health and Planetary Health. Also, you will learn about innovative tools and frameworks used to study and tackle some of these Global Health challenges of the Sustainable Development Goals era. This MOOC proposes you a dynamic, international and interdisciplinary programme based on the One Health approach (human-animal-environmental dimensions) and involving more than 30 top experts from more than 20 academic and research institutions and international organisations based in Geneva, Paris, Montreal and the world. Policy makers from the World Health Organisation, clinicians from the University Hospitals of Geneva, epidemiologists from Institut Pasteur etc. will share with you their knowledge and experiences all along this MOOC. Video-lectures have been filmed in different parts of the world and settings (from the field to the lab and office) and will be combined with the latest open readings and interactive activities in the discussion forum, video-conferences etc. This MOOC keeps evolving and enriching actively over time and two new sections on "Health Benefits at the Human-Animal-Ecosystem Interface" and "Management of Ecosystems under Global Changes: Implication for Human Health" have been added in May 2018. This latter section was developed in close collaboration with experts from World Health Organisation and the Convention on Biological Diversity and is introduced by Dr. Tedros Adhanom Ghebreyesus, WHO Director-General. The development of this MOOC was led by Dr. Rafael Ruiz de Castañeda, Dr. Isabelle Bolon and Prof. Antoine Flahault from the Institute of Global Health of the University of Geneva. The list of instructors is completed by Prof. Arnaud Fontanet (Institut Pasteur) and Prof. André Ravel (Faculty of Veterinary Medicine, University of Montreal).
Global Health: An Interdisciplinary Overview	19 hrs	This course proposes an overview of current global health challenges drawing on the insights of several academic disciplines including medicine, public health, law, economics, social sciences and humanities. This interdisciplinary approach will guide the student into seven critical topics in global health.

Antimicrobial Resistance--Theory and Methods	9 hrs	The course will cover the topics related to antimicrobial resistance with basic definitions and overview on antimicrobials their use and the emergence and spread of resistance. The course will guide you through the concepts and the importance of resistance spread and dissemination and how that happens. It will show you how bacteria become resistant and which mechanisms they might use for this. And as part of the course you will also receive some training in methods for antimicrobial susceptibility testing (AST) and detection of specific resistance in the microbiological laboratories with the basic methods available and with focus on the obtention of good quality results which can be interpreted and used for different purposes. Additionally, it will show you how to use genomic analysis tools to analyze whole genome sequencing data to detect resistance genes (and or other genes of interest) in a simple and easy way using online tools freely available. In the new new version an additional module including detection of specific resistance mechanisms was added. After this course you should be able to: 1. Describe the most important families of antimicrobials and mode of action 2. Understand the basic concepts of antimicrobial resistance from several perspectives (clinical, research and microbiological) 3. Enumerate and describe how bacteria can become resistant and the mechanisms that may be involved in that process 4. Describe how antimicrobial resistance emerges and spreads around the world including concepts of antimicrobial resistance transfer, selection and dissemination 5. Enumerate the methods used for antimicrobial susceptibility testing (AST) 6. Compare dilution and diffusion methods and know the basic techniques of agar disk diffusion, broth dilution and agar dilution methods 7. Have detailed theoretical knowledge on how to perform the main methods in a laboratory 8. Know the basic concepts about analysis and interpretation of results of AST, including different breakpoints, cut-off setting and their applications. 9. Understand the importance and related concepts related to quality management and quality assurance method standardization, applied to AST 10. Relate the information obtained in this course with real cases of resistant bacteria spreading in patients, the community, animals or the environment 11. Relate the phenotypical results with results from genotyping using molecular techniques for detection of resistance mechanisms 12. Understand the concept and be able to apply genomic analysis tools used to detect resistance genes and other relevant genes from Whole Genome Sequencing (WGS) data (with demonstration of selected online tools)
Fighting COVID-19 with Epidemiology: A Johns Hopkins Teach-Out (https://www.coursera.org/learn/covid19-epidemiology?utm_medium=email&utm_source=other&utm_campaign=partner.8.opencourse.targetedmessages.marketing~partner.8.KgPy15eFTxqdgao_YqVH5g)	1 cr hr	Starts March 31. This free Teach-Out is for anyone who has been curious about how we identify and measure outbreaks like the COVID-19 epidemic and wants to understand the epidemiology of these infections. The COVID-19 epidemic has made many people want to understand the science behind pressing questions like: "How many people have been infected?" "How do we measure who is infected?" "How infectious is the virus?" "What can we do?" Epidemiology has the tools to tell us how to collect and analyze the right data to answer these questions. In addition to a basic understanding of these essential tools, this Teach-Out provides a way for you to learn and connect with one another while continuing to practice the social distancing measures that will help keep us safe. We also hope to provide you with some tangible calls to action that will help you affect positive change for yourself, your community, and our society.
EdX: https://www.edx.org/		

Birds 101: Introduction to Pet Birds (Also available through Canvas)	8 hrs	Provided by Dr. Marcy Souza. Learn to care for your pet birds, from parrots to finches, by studying nutrition & husbandry, behavioral characteristics, and common veterinary procedures. Basic behavioral characteristics of birds commonly kept as pets, including parakeets, parrots, canaries and more Basic husbandry, nutrition, and biosecurity for pet birds Anatomy and physiology of birds Common veterinary procedures used for birds in clinical settings
Clinical Reasoning Process	12 hrs	The course introduces the clinical reasoning process as it is used by clinicians from different health disciplines: medicine, dentistry, nursing, veterinary medicine, and pharmacy. The course offers a step-by-step description and explanation of the process, illustrated with clinical examples. This course is of interest to both students and health professionals as they hone their knowledge and clinical reasoning skills.