MARSHALL UNIVERSITY
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School of Pharmacy

Syllabus
PHAR 661: Therapeutics II (fall, 2015)

This syllabus is not to be construed as a contract with the student and is subject to change.

The School of Pharmacy reserves the right to change the course syllabus. *The School should notify the students through the course notification system or by an email preferably through the Blackboard system.*

Some course materials used in this class may be copyrighted and should not be shared with individuals not enrolled in this course.

Course meeting days and time	Tuesday, Wednesday, Thursday 3:45 – 5:15 PM
Location	Studio Classroom L04
Team Leader / Instructor	Timothy Long, Ph.D.
Office	CEB 220
Phone	304-696-7393
Email	longt@marshall.edu
Office hours	Tuesday 5:15 – 6:15 PM and by appointment

Faculty	Email	Office	Phone	Office Hours
Jamie Allman, Pharm.D., BCPS	James.allmanII@va.gov	CEB 107	304-654-4004	by appointment
C.K. Babcock, Pharm.D., BCPS	babcockc@marshall.edu	CEB 138	304-696-7380	by appointment
Abby Hay, Pharm.D., BCPS	hay15@marshall.edu	CEB 107	304-696-7380	by appointment
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Each faculty member will be available to meet with students outside of office hours by appointment. If the instructor accepts appointments, then please email the instructor for availability. The student can expect the instructor to respond to e-mails and phone messages within 72 hours.

Course Description: This course discusses clinical microbiology and principles of anti-infective therapy as well as the pathophysiology, associated pharmacology, and therapeutic approaches to infectious diseases and conditions of the integumentary system.

Prerequisites: P-2 status

Text Books:

Required:

- The Sanford Guide to Antimicrobial Therapy 2015 (45th edition)
  David N. Gilbert Ed.
  ISBN: 978-1-930808-84-3
  https://store.sanfordguide.com/antimicrobial-therapy-2015-pocket-edition-p94.aspx

- Pharmacotherapy Casebook: A Patient-Focused Approach, 9th Edition
  Terry Schwinghammer, Julia Koehler

ISBN 0071830138 / 9780071830133
http://www.mhprofessional.com/product.php?isbn=0071830138&cat=116
Pharmacy Access Link: http://accesspharmacy.mhmedical.com/book.aspx?bookID=1031

- Pharmacotherapy A Pathophysiologic Approach, 9th Edition
  Joseph DiPiro, Robert L. Talbert, Gary Yee, Barbara Wells, L. Michael Posey
  ISBN: 0071800530 / 9780071800532
  http://www.mhprofessional.com/product.php?isbn=0071800530&cat=116
  Pharmacy Access Link: http://accesspharmacy.mhmedical.com/book.aspx?bookID=689

Recommended:

- Goodman and Gilman's The Pharmacological Basis of Therapeutics, 12th Edition
  Laurence Brunton, Bruce A. Chabner, Bruce Chabner, Bjorn Knollman
  ISBN 0071624422 / 9780071624428
  http://www.mhprofessional.com/product.php?isbn=0071624422
  Pharmacy Access Link: http://accesspharmacy.mhmedical.com/book.aspx?bookid=374

Course Objectives:

Number	Objective	Linkage to MUSOP Abilities	How Assessed
1	Describe the classification, pharmacology, and spectrum of activity of anti-infectives.	1	Exams, IRAT/GRAT, Active Learning Exercise
2	Describe the principles of clinical microbiology and virology and the use of antimicrobial stewardship.	1,5,6,7	Exams, IRAT/GRAT, Active Learning Exercise
3	Describe the anatomy and pathophysiology of selected infective processes and integumentary diseases and conditions.	1,6,7	Exams, IRAT/GRAT, Active Learning Exercise
4	Apply knowledge of the pharmacokinetic and pharmacodynamic properties of anti-infectives.	1,5,6,7,8,56	Exams, IRAT/GRAT, Active Learning Exercise
5	Interpret laboratory data and information obtained from patient.	1,6	Exams, IRAT/GRAT, Active Learning Exercise
6	Apply critical thinking skills to create and/or optimize an individualized pharmacotherapeutic care plan based upon patient-specific parameters.	1,5,6,7,8	Exams, IRAT/GRAT, Active Learning Exercise
7	Perform ongoing patient monitoring, evaluation, and follow-up to assess a patient's progress and potential adherence	1,5,6	Exams, IRAT/GRAT, Active Learning Exercise
8	Highlight patient counseling related to pharmacotherapy of anti-infectives.	1,5	Exams, IRAT/GRAT, Active Learning Exercise
9	Apply evidence-based medicine and appropriate medical literature evaluation techniques.	1,56	Exams, IRAT/GRAT, Active Learning Exercise
10	Manage adverse drug events using appropriate withdrawal and/or addition of drug therapy and supportive care.	1,6	Exams, IRAT/GRAT, Active Learning Exercise
11	Recommend appropriate preventive measures to reduce transmission of infectious diseases.	1,56	Exams, IRAT/GRAT, Active Learning Exercise

Schedule of Activities:

Week No.	Discussion (D) No.	Date	Weekday (3:45-5:15 PM)	Meeting Topic	Course Student Learning Outcomes	Instructor
1	D1	08/25/15	Tues.	• Clinical Microbiology I: Normal Flora and Human Pathogens	**1** Delineate commensal bacteria according to colonization site **2** Identify pathogenic bacteria based on organ systems	Long
1	D2	08/26/15	Weds.	• Antibacterial Pharmacology I	**3** Describe the pharmacological properties of synthetic antibacterials (i.e., sulfonamides, trimethoprim, quinolones, nitrofurantonin, nitroimidazoles, fosfomycin) **4** Delineate the activity spectra of synthetic antibacterials. **5** Describe the mechanisms of sulfonamide and quinolone resistance.	Long
1	D3	08/27/15	Thurs.	• Antibacterial Pharmacology II	**6** Describe the pharmacological properties of β-lactam antibacterials (i.e., penicillins, cephalosporins, carbapenems, monobactams) and b-lactamase inhibitors (i.e., clavulanate, tazobactam, sulbactam) **7** Delineate the activity spectra of β-lactam antibacterials **8** Describe the mechanisms of β-lactam resistance.	Long
2	D4	09/01/14	Tues.	• Antibacterial Pharmacology III	**9** Describe the pharmacological properties of peptide antibacterials (i.e., glycopeptides, lipopeptides, polymyxin, colistin, fidaxomicin) **10** Delineate the activity spectra of peptide antibacterials **11** Describe the mechanism of vancomycin resistance **12** Describe the pharmacological properties of RNA (i.e., rifampin) and protein synthesis inhibitors (i.e., chloramphenicol, clindamycin, streptogramins, fusidic acid, mupirocin, macrolides, aminoglycosides, oxazolidinones, tetracyclines)	Long
2	D5	09/02/15	Weds.	• Antibacterial Pharmacology IV	**13** Delineate the activity spectra of RNA and protein synthesis inhibitors **14** Describe the mechanisms of macrolide and tetracycline resistance **15** Describe the clinical methods to identify etiological agents based on infection site	Long
2	D6	09/03/15	Thurs.	• Antibacterial Pharmacology V	**16** Describe the methods of antibacterial susceptibility testing. **17** Interpret a clinical microbiology lab report and lab values. **18** Describe the fundamental pharmacokinetic and pharmacodynamic properties of antibacterial agents	Long
3	D7	09/08/15	Tues	• Pathophysiology and Pharmacological Agents for Skin, Skin Structure, Bone, and Joint Infections	**19** List the major etiological agents of bacterial skin, bone, and joint infections **20** Describe the epidemiology, transmission and pathophysiology of bacterial skin, bone, and joint infections **21** Give the pharmacological properties of prototypical agents used in the pharmacotherapy of bacterial skin, bone, and joint infections	Long
4		09/14/15	Mon. 6:30 PM	• **Exam I (D1-D7)***		

Week No.	Discussion (D) No.	Date	Weekday (3:45-5:15 PM)	Meeting Topic	Course Student Learning Outcomes	Instructor
3	D8	09/09/15	Weds.	• Diagnosis and Treatment of Skin/Skin Structure Infections	**22** Identify patient populations at increased risk for skin/skin structure, bone, and joint infections **23** Utilize evidence based medicine to recommend antimicrobial regiment for patients with skin/skin structure, bone, and joint infections **24** Develop a pharmacotherapeutic treatment for patients with skin/skin structure, bone, and joint infections	Babcock
3	D9	09/10/15	Thurs.	• Diagnosis and Treatment of Bone and Joint Infections	**25** Determine appropriate safety and efficacy monitoring of antimicrobial therapy for skin/skin structure, bone, and joint infections **26** Highlight standard duration of antimicrobial treatment for skin/skin structure, bone, and joint infections **27** Discuss the recommended and alternative drug treatments for common skin/skin structure, bone, and joint infections	Babcock
4	D10	09/15/15	Tues.	• Pathophysiology and Pharmacological Agents for Intraabdominal and Gastrointestinal Infections	**28** List the major etiological agents of intraabdominal and gastrointestinal infections **29** Describe the epidemiology, transmission and pathophysiology of intraabdominal and gastrointestinal infections **30** Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of intraabdominal and gastrointestinal infections	Long
4	D11	09/16/15	Weds.	• Diagnosis and Treatment of Intraabdominal Infections	**31** Identify patient populations at risk for contracting intraabdominal and gastrointestinal Infections **32** Describe the most appropriate drug and nondrug measures to treat intraabdominal and gastrointestinal infections **33** Develop a pharmacotherapeutic treatment and monitoring plan for patients with intraabdominal and gastrointestinal infections	Babcock
4	D12	09/17/15	Thurs.	• Diagnosis and Treatment of Gastrointestinal Infection	**34** Explain with which syndromes of infectious diarrhea that antibiotic therapy has been proven to be of value and should be prescribed **35** Develop a pharmacotherapeutic treatment and monitoring plan for a patient with C. difficile associated diarrhea.	Babcock
5	D13	09/22/15	Tues	• Pathophysiology and Pharmacological Agents for UTIs	**36** List the major etiological agents of urinary tract infections **37** Describe the epidemiology, transmission and pathophysiology of urinary tract infections **38** Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of urinary tract infections	Long
5	D14	09/23/15	Weds. .	• Diagnosis and Treatment of UTIs	**39** Highlight laboratory tests in the diagnosis of UTIs **40** Determine drugs for the treatment of UTIs/prostatitis based upon patient-specific factors **41** Develop a pharmacotherapeutic treatment and monitoring plan for a patient with a UTI/prostatitis	Hay
5	D15	09/24/15	Thurs.	• Pathophysiology and Pharmacological Agents for STDs	**42** List the major etiological agents of sexually transmitted diseases **43** Describe the epidemiology, transmission and pathophysiology of sexually transmitted diseases **44** Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of sexually transmitted diseases	Long
6	D16	09/29/15	Tues.	• Diagnosis and Treatment of STDs	**45** Identify patient at risk for infection with a sexually transmitted infections **46** Describe the common presenting symptoms and potential complications of genital infections **47** Discuss nondrug and drug prophylaxis and treatment options for a patient at risk of acquiring or with an STD **48** Develop a pharmacotherapeutic treatment and monitoring plan for a patient with a STI	Babcock
7		10/05/15	Mon. 6:30 pm	• **Exam 2 (D8-D16)***		

Week No.	Discussion (D) No.	Date	Weekday (3:45-5:15 PM)	Meeting Topic	Course Student Learning Outcomes	Instructor
6	D17	09/30/15	Weds..	• Pathophysiology and Pharmacological Agents for Herpesvirus and Maningitis	**49** List the major etiological agents of herpesvirus and central nervous system infections **50** Describe the epidemiology, transmission and pathophysiology of herpes and central nervous system infections **51** Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of herpes and central nervous system infections	Long
7	D18	10/06/15	Tues.	• Diagnosis and Treatment of Herpesvirus Infections	**52** Describe the clinical presentation and prevention strategies for HHV infections **53** Describe the supportive treatments for HHV infections. **54** Develop a pharmacotherapeutic treatment and monitoring plan for a patient with a HHV infection.	Allman
7	D19	10/07/15	Weds	• Diagnosis and Treatment of Meningitis	**55** Describe the clinical presentation and lab values for patients with a CNS infection **56** Select appropriate empiric therapy directed against suspected bacterial meningitis according to age group **57** Develop a pharmacotherapeutic treatment and monitoring plan for a patient with a CNS infection	Allman
7	D20	10/08/15	Thurs.	• Pathophysiology and Pharmacological Agents for Infective Endocarditis, Bacteremia, and Sepsis	**58** List the major causes of endocarditis, bacteremia, SIRS and sepsis **59** Describe the epidemiology, transmission and pathophysiology of endocarditis, bacteremia, SIRS and sepsis **60** Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of endocarditis and bacteremia infections	Long
8	D21	10/13/15	Tues.	• Diagnosis and Treatment of Infective Endocarditis and Bacteremia	**61** Identify patient populations at increased risk for infective endocarditis, bacteremia, and sepsis **62** Describe the clinical presentation, including laboratory findings (e.g. echocardiography), and prevention strategies for infective endocarditis and bacteremia	Hay/Allman
8	D22	10/14/15	Weds.	• Diagnosis and Treatment of Bacteremia and Sepsis	**63** Identify patients who should receive antimicrobials for infective endocarditis prophylaxis as well as bacteremia-causing procedures that can lead to the condition in predisposed individuals. **64** Discriminate between bacteremia, systemic inflammatory response syndrome, sepsis, severe sepsis, and septic shock. **65** Describe the priorities for treatment of sepsis. **66** Recommend an appropriate antibiotic regimen for treatment of sepsis based on patient characteristics and site of primary infection.	Hay
8	D23	10/15/15	Thurs.	• Pathophysiology and Pharmacological Agents for Upper RTIs	**67** List the major causes of upper respiratory tract infections **68** Describe the epidemiology, transmission and pathophysiology of common upper respiratory tract infections **69** Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of upper respiratory tract infections	Long
9	D24	10/20/15	Tues.	• Diagnosis and Treatment of Upper RTIs	**70** Identify patient populations at increased risk for upper RTI. **71** Describe the clinical presentation (e.g. viral vs. bacterial, cold vs. flu) and prevention strategies for upper RTIs **72** Describe the use of vaccines and monoclonal antibodies in the prevention of upper RTIs **73** Describe the supportive treatments for viral and bacterial upper RTIs **74** Develop a pharmacotherapeutic treatment and monitoring plan for pediatric and adult patients with an upper RTI	Babcock/Allman
10		10/26/15	Mon. 6:30 PM	• **Exam III (D17-D24)***		

Week No.	Discussion (D) No.	Date	Weekday (3:45-5:15 PM)	Meeting Topic	Course Student Learning Outcomes		Instructor
9	D25	10/21/15	Weds.	• Pathophysiology and Pharmacological Agents for Lower RTIs	**75**	List the major causes of common lower respiratory tract infections	Long
					76	Describe the epidemiology, transmission and pathophysiology of lower respiratory tract infections	
					77	Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of lower respiratory tract infections	
10	D26	10/27/15	Tues.	• Diagnosis and Treatment of Lower RTIs	**78**	Differentiate between community acquired and healthcare associated pneumonia based upon patient risk factors	Hay/Allman
					79	Compare and contrast the clinical manifestations of various lower RTI	
					80	Develop a pharmacotherapeutic treatment and monitoring plan for a patient with a lower RTI	
10	D27	10/28/15	Weds.	• Pathophysiology and Pharmacological Agents for Mycobacteria Diseases	**82**	List the major species that cause mycobacteria infections	Long
					83	Describe the epidemiology, transmission and pathophysiology of diseases caused by mycobacteria	
					84	Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of mycobacteria diseases	
10	D28	10/29/15	Thurs.	• Diagnosis and Treatment of Tuberculosis	**85**	Determine individuals at high risk for developing TB and multidrug resistant (MDR) TB	Kimble
					86	Describe the methods to test for TB	
					87	Differentiate the treatment regimens for latent and active TB	
11	D29	11/03/15	Tues	• Pathophysiology and Pharmacological Agents for Invasive Mycoses	**88**	List the major causes of invasive fungal infections	Long
					89	Describe the epidemiology, transmission and pathophysiology of invasive diseases caused by fungi	
					90	Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of invasive fungal infections including important drug interactions	
11	D30	11/04/15	Weds.	• Diagnosis and Treatment of Invasive Mycoses	**91**	Identify risk factors for invasive fungal infections	Hay/Allman
					92	Describe the clinical presentation, including laboratory findings (e.g. chest x-ray), and prevention strategies for invasive fungal infections	
					93	Develop a pharmacotherapeutic treatment and monitoring plan for a patient with an invasive fungal infection	
12	D31	11/05/15	Thurs.	• Pathophysiology and Pharmacological Agents for HIV	**94**	Describe the structure and lifecycle of HIV	Long
					95	Describe the epidemiology, transmission and pathophysiology of HIV	
					96	Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of HIV infections including important drug interactions	
12	D32	11/10/15	Tues.	• Diagnosis and Management of HIV Infections	**97**	Describe how a HIV infection is diagnosed and monitored	Babcock/Allman
					98	Recognize the clinical presentation of primary HIV infection	
					99	Discuss the scientific principles that underlie the therapeutic goals of antiretroviral drugs.	
					100	Compare and contrast recommended initial antiretrovirals and describe important factors associated with therapeutic outcomes.	
					101	Justify the use of specific antiretrovirals in a patient with HIV	
					102	Develop a pharmacotherapeutic management and monitoring plan for a patient with a HIV infection	
12	D33	11/11/15	Weds.	• Diagnosis and Treatment of Viral Hepatitis	**103**	Identify risk factors for viral hepatitis	Hay/Babcock /Allman
					104	Describe the clinical presentation, including laboratory findings (e.g. chest x-ray), and prevention strategies for viral hepatits	
					105	Develop a pharmacotherapeutic treatment and monitoring plan for patients with HCV and hepatitis-HIV coinfection	
12		11/16/15	Mon. 6:30 PM	**• Exam IV (D25-D33)***			

Week No.	Discussion (D) No.	Date	Weekday (3:45-5:15 PM)	Meeting Topic	Course Student Learning Outcomes		Instructor
13	D35	11/17/15	Tues	• Diagnosis and Treatment of Opportunistic Infections in Immunocompromised Patients	**109** **110**	Describe the clinical presentation, including laboratory findings (e.g. CD4 counts), and prevention strategies for opportunistic infections in immunocompromised patients Determine under which clinical stage of an opportunistic infection when to begin, continue, or halt prophylactic antimicrobial therapy in in immunocompromised patients (e.g., HIV, cancer)	Babcock
13	D36	11/18/15	Weds	• con.	**111**	Develop a pharmacotherapeutic treatment and monitoring plan for a immunocompromised patient with an opportunistic infection	Babcock
13	D37	11/19/15	Thurs.	• Pathophysiology and Pharmacological Agents for Parasitic and Vector-borne Infections	**112** **113** **114**	List the major species of worms that cause parsasitic and vector-borne infections Describe the epidemiology, transmission and pathophysiology of parasitic and vector-borne infections Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of parsasitic and vector-borne infections	Long
14		11/24/15	no meeting	• Fall break			
14		11/25/15	no meeting				
14		11/26/15	no meeting				
15	D38	12/01/15	Tues.	• Pathophysiology and Pharmacological Agents for Skin Diseases and Conditions	**115** **116**	Describe the epidemiology and pathophysiology of common diseases of the integumentary system including drug-induced conditions Delineate the pharmacological properties of prototypical agents used in the pharmacotherapy of integumentary system diseases/conditions	Long
15	D39	12/02/15	Weds.	• Diagnosis and Treatment of Skin Diseases and Conditions	**117** **118** **119**	Identify risk factors for diseases/conditions of the integumentary system Describe the clinical features presented in diseases/conditions of the integumentary system Compare and contrast the treatment approaches to SJS/TEN.	Kimble
15	D40	12/03/15	Thurs.	• con.	**120** **121** **122**	Identify drugs and/or drug classes that are common attributed to cutaneous drug reactions Assess the counteractive measures taken for a drug-induced skin conditions Determine appropriate safety and efficacy monitoring of therapy for diseases/conditions of the integumentary system	Kimble
16		12/7/2015	Mon. 11:00 AM	• **Cumulative Final Exam***			

***Major Assessment**

Course Delivery. Course delivery methods will include Active Learning Exercises (ALEs) with group discussion. Students are also required to be prepared with the appropriate technology and materials (e.g., Sanford Guide) needed for the course and each session. You will need a Turning Technologies Response RF device for in-class polling incorporated into PowerPoint presentations. For IRATs/GRAT and exams, you will be required to bring your personal laptop and have the Respondus Lockdown Browser as described below under Test Security section of the syllabus.

Course Grades. Final course grades will be calculated as follow:

Point Distribution:

IRATs/GRATs/ALEs: 20%
Hourly Exams: 60% (4 x 15%)
Final Comprehensive Exam: 20%

Letter grades distribution:

A = 89.50 to100% = A
B = 79.50 to less than 89.50%
C = 69.50 to less than 79.50%
F = Less than 69.50%

Attendance Policy. Each student is required to attend class. Attendance is mandatory at graded events. Only excused absences accepted – refer to university and school policies. Make up grades will be given only in cases of extraordinary circumstances due to documented illness (i.e., doctor's note) or death of a family member.

Course Material Policy. All handouts, PowerPoint presentations, and class materials posted on Blackboard are intended for the sole use of students registered in PHAR 661. Sharing any of these materials with individuals outside the class

including students in future classes will be considered a violation of professionalism standards. Accepting answers to course assignments including case discussions, team-based learning sessions, and homework from upper class students or classmates will be considered a violation of academic integrity.

University Policies. University policies regarding Academic Dishonesty, Students with Disabilities, University Computing Services' Acceptable Use, Affirmative Action, and Sexual Harassment can be found at http://www.marshall.edu/wpmu/academic-affairs/policies/ .

School of Pharmacy Policies.

SOCIAL JUSTICE POLICY STATEMENT. Marshall University is committed to bringing about mutual understanding and respect among all individuals and groups at the University. As part of Marshall University, School of Pharmacy has made a commitment to social justice. Therefore, no one will be discriminated against on the basis of race, gender, ethnicity, age, sexual orientation, religion, social class, or differing viewpoints. Each student will be viewed as a valuable member of this class and as the faculty for the course, I will strive to facilitate an atmosphere/learning environment where mutual understanding and respect are actualized.

ACADEMIC, ETHICAL, AND PROFESSIONAL CONDUCT. Student expectorations for academic, ethical, and professional conduct are defined within the school's Ethical and Professional Conduct Policy and the university's Academic Dishonesty Policy.

Second Chance and Remediation Policy. Second chance and remediation are mechanisms designed to assist students who have struggled within the classroom environment in demonstrating achievement of classroom and curricular learning outcomes. These processes are described in sections 200.001.003 (Second Chance) and 200.001.004 (Remediation) of the Academic Standards for Grading, Progressions, Dismissal, and Re-admission Policy.

Test Security Policy. In order to ensure the security of all examinations, the School of Pharmacy has adopted the following policies:

1. Test Administration
   - A. Non-electronic testing
     - a. Students may not access any electronic equipment during the exam that has not been provided by the faculty, including but not limited to calculators, cell phones, laptops and PDAs.
   - B. Electronic testing
     - a. Only those resources (electronic or otherwise) approved by the instructor may be used or accessed during the testing session.
     - b. Students enrolled within courses using electronic test must download and install both Respondus and SofTest.
       - (1) Log into your ExamSoft® portal using the URL (www.examsoft.com/marshallpharm) and credentials provided with your personal account: SofTest Instructions
       - (2) Install the Respondus Lockdown Browser. The installation will require an installation code that must be acquired from Computing Services.
     - c. All ExamSoft® assessments must be downloaded at least one hour before the allotted assessment time using the provided download password. Once the encrypted assessment is downloaded, it cannot be decrypted until the course coordinator provides the specific assessment password. It is recommended that the student download the assessment as suggested as test access cannot be guaranteed inside the one hour window.
     - d. Once open, ExamSoft® provides a secure offline assessment environment blocking access to all other material.
     - e. If problems accessing the assessment materials occurs please contact IT staff or refer to the ExamSoft® Contact and Solution Center
     - f. Students may be required to verify assessment upload to a test proctor prior to leaving the testing area.
2) Post-assessment Review
   - A. Upon completion of on an individual assessment, an instructor may release assessment data that they deem beneficial to students to review.
   - B. If individual post-assessment review is needed:
     - a. Students are not allowed to view any assessment without an appointment with a course instructor.
     - b. Unless otherwise determined by the course director, only one student may be allowed to view the exam at one time.
   - C. No electronic devices (e.g. laptops, tablets and phones) will be allowed to be used during the review session.