

SYLLABUS

Course: Management of Fire Related Human Behavior

Course & Section: FFP 4507

Credit Hours: 3

Session: Summer 2017

** On-line

Instructor: Dr. Chris Reynolds

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Bio for Dr. Chris Reynolds, CEM, EFO, MEMS, CFO (Lt.Col., USAF, RET)

Hello everyone. My name is Dr. Chris Reynolds and I am your professor for this class. I retired after 32 years as a Deputy Chief/Shift Commander with Hillsborough County Fire Rescue (Tampa, FL). I am a board certified emergency manager (CEM) and hold a doctorate in education. I am also a Chief Fire Designee (CFO) through the International Association of Fire Chief's (IAFC) and a graduate of the Executive Fire Officer (EFO) program at the National Emergency Training Center in Emmitsburg, Maryland. I also hold the Military Emergency Manager Specialist Master Badge.

I also retired from the United States Air Force Reserve as a Lieutenant Colonel, finishing up my 21 year Air Force career as an Emergency Preparedness Liaison Officer (EPLO) assigned to the Defense Support of Civilian Authorities (DSCA) Command Cell, 1st Air Force (Air Forces Northern), Tyndall Air Force Base, Fla. Air Force EPLOs support the designated combatant commander and lead federal agencies to assist in coordinating military support to local, state and federal agencies involved in domestic incident management. I was deployed to the Oklahoma City Bombing in 1995, assisting the FEMA Incident Support Team (IST) on site. Again, in 1995 I was deployed to the Florida State Emergency Operations Center as a part of the State Emergency Response Team (SERT) and coordinated all firefighting and urban search and rescue operations during Hurricane Opal.

In my military role, I deployed to New Orleans in the aftermath of Hurricane Katrina as the officer in command of an aeromedical evacuation liaison team (AELT) that was a part of Joint Task Force (JTF) Katrina and coordinated joint civilian/military airlift of over 20,000 evacuee's and 4,500 casualties. I had the honor and privilege of deploying with a GREAT team of personnel shortly after the September 11th attacks. My Team and I were among the first mobilized in the aftermath of the

September 11th attacks in 2001 and deployed as the commanding officer of an Aeromedical Evacuation Team to two classified forward locations in the Afghanistan/Pakistan area. My Team coordinated the medical evacuation of US and coalition combat casualties and directly supported combat search and rescue operations. Our Team was recognized by the Department of Defense and awarded the valor "V" device for our efforts. In 1995, I deployed to Haiti during OPERATION UPHOLD DEMOCRACY and coordinated rotary lift-aeromedical evacuation between Port A' Prince and the USNS Comfort. Most recently, I was deployed during the Haitian Earthquake and coordinated all casualty movement from the Haiti AOR to South Florida air hubs for transport to US Trauma Centers.

**Course Website: <http://lss.at.ufl.edu>

** Course Communications: There is a General Discussion tab that can be used, or send me an email through the course email. Urgent messages can be sent to my Jeffrey.lindsey@ufl.edu email.

Optional Text:

Fire Protection Handbook 20th Ed. (2008). Volumes I & II. Arthur Cote (Editor). NFPA ISBN# 9780877657583

Blaich, P (2008). The Benefits of Behavioral Research in the Fire Service. iUniverse, Inc. ISBN# 9780595485499

**Additional Resources: Use resources on the course site under the Resource tab

**Course Description: This course presents a study of human behavior in fire and other emergency situations. Students will examine current and past research on human behavior, systems models, life safety education, and building design to determine interactions of these areas in emergency situations. Students will develop an understanding of a best-practice building life safety system as one that combines knowledge in the areas of psychology and sociology joined with engineering and education to produce the best possible outcomes in terms of human survivability in an emergency.

**Course objectives:

- demonstrate knowledge of human behavior during fire incidents.
- demonstrate the ability to understand behavior modeling.
- demonstrate the ability to understanding of the public's perception of the modern day fire service.
- demonstrate knowledge of the European and Western fire suppression models
- demonstrate the ability to understand the various fire research models.
- demonstrate an understanding of the data linkages.

****Teaching Philosophy:** I am looking for students to demonstrate a working knowledge of the subject. You need to be creative when you complete your assignments but maintain a professional appearance of your work. Your work needs to be complete and in such a manner that someone can pick up your document and understand what you are trying to convey. And most of all your work needs to be supported with research and cited in properly in APA format.

****Instructional Methods:** The course is designed for individual and group interactivity. It is important to post and respond to discussion questions in the course within the time frame allotted. This provides a learning environment by networking with other students in the course. The assignments are individual base to give you the opportunity to do a variety of activities, in many cases, similar to what you will be doing in role as a leader in the emergency services profession.

Course Policies:

Attendance Policy: The course is designed in module format. You should check the site at least once a week. You are required to complete the assignments including discussion questions within the time period designated on the module. There will be meetings set up throughout the course. *Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at:* <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

****Quiz/Exam Policy:** There is a final paper for this course. There are no exams or quizzes.

Make-up Policy: *You must contact me if you are going to be late on any assignment to receive credit.*

****Assignment Policy:** All assignments have a due date. Please be sure to check the date and time it is due in each module.

****Course Technology:** Class meetings will require a web camera and mic/audio. If you are not able to use a web camera you will need to at least provide audio/mic, you can call in on a phone also.

**** UF's honesty policy**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report

any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of in this class.

UF Policies:

University Policy on Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

**Netiquette: Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. [Describe what is expected and what will occur as a result of improper behavior]
<http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

Getting Help:

For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:

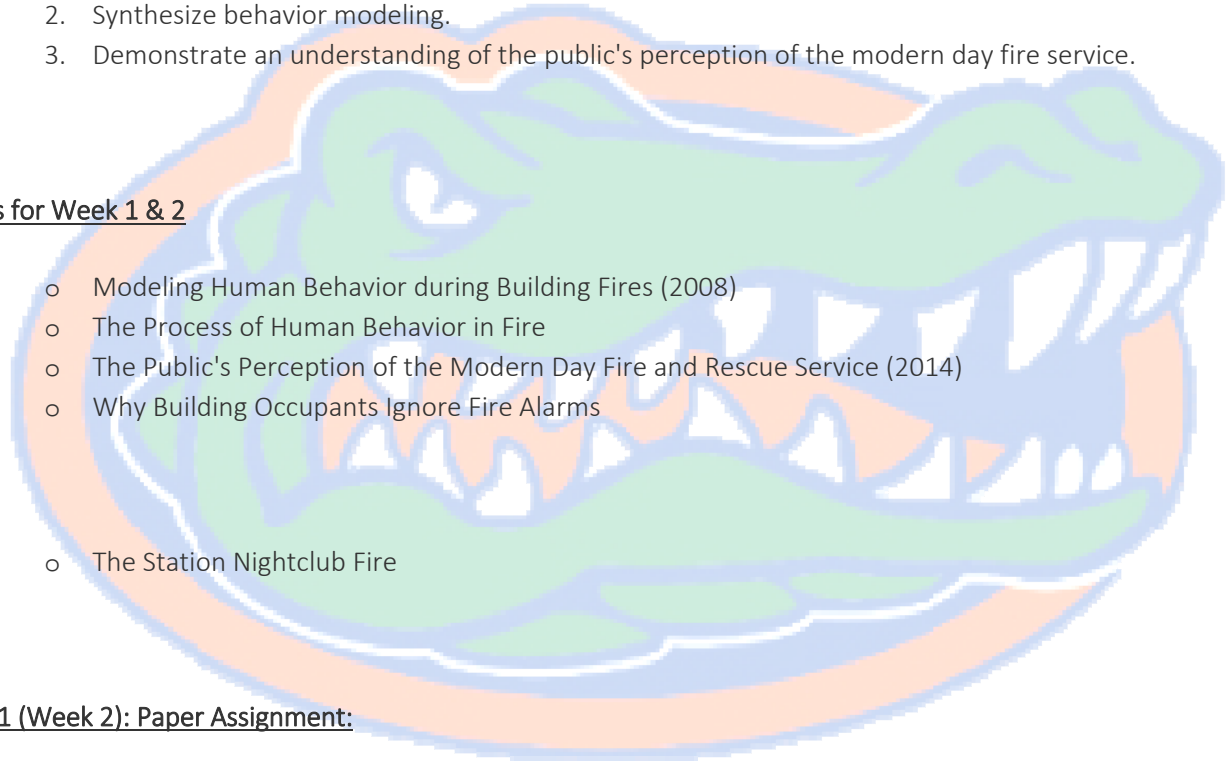
- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Weeks	Assignments
1 & 2	<p><u>Objectives:</u></p> <ol style="list-style-type: none"> 1. Describe human behavior during fire incidents. 2. Synthesize behavior modeling. 3. Demonstrate an understanding of the public's perception of the modern day fire service. <p><u>Readings for Week 1 & 2</u></p> <ul style="list-style-type: none"> o Modeling Human Behavior during Building Fires (2008) o The Process of Human Behavior in Fire o The Public's Perception of the Modern Day Fire and Rescue Service (2014) o Why Building Occupants Ignore Fire Alarms <p><u>Video:</u></p> <ul style="list-style-type: none"> o The Station Nightclub Fire <p>-</p> <p><u>Module 1 (Week 2): Paper Assignment:</u></p> <p>Prepare a 4 page (500-750 word) Reaction Paper following the format provided addressing the Module 1 readings. Be sure that you address <i>human behavior, behavior modeling, the public's perception of the modern day fire service, and why building occupants ignore fire alarms.</i></p>



3 & 4

Objectives:

1. Describe the European and Western fire suppression models.
2. Synthesize the various fire research models.
3. Demonstrate an understanding of the data linkages.

Readings for Week 3 & 4:

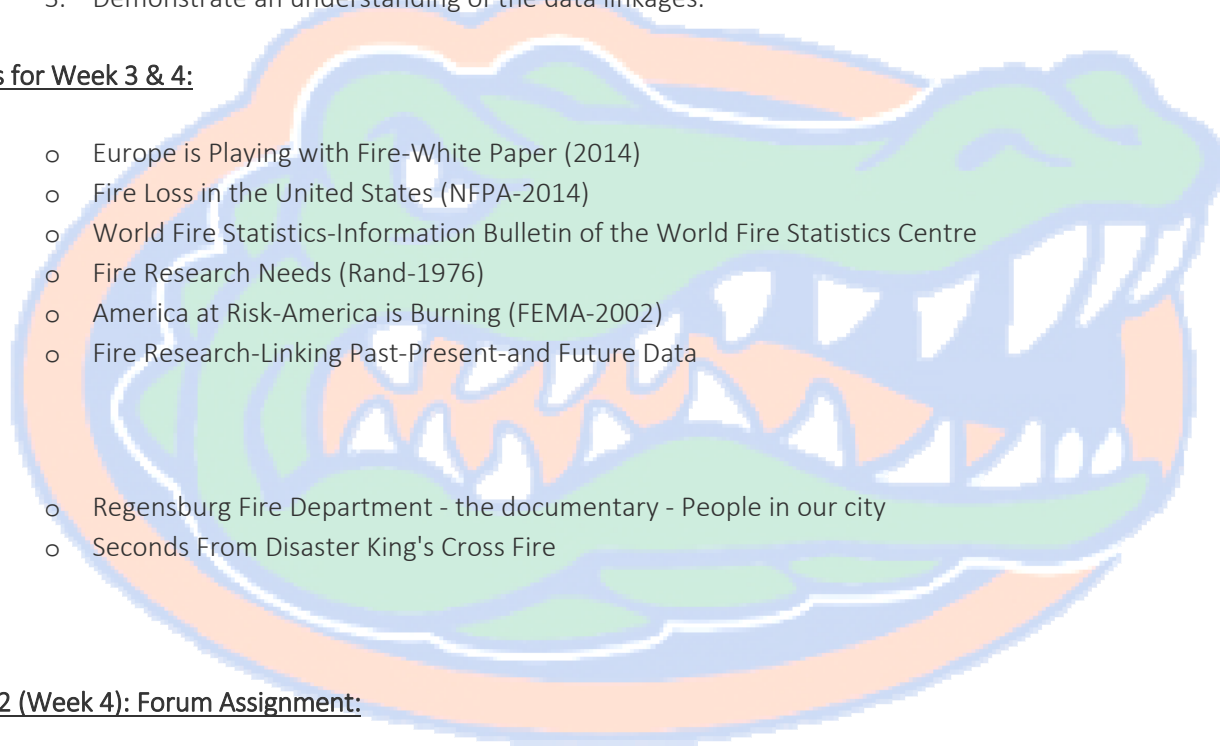
- o Europe is Playing with Fire-White Paper (2014)
- o Fire Loss in the United States (NFPA-2014)
- o World Fire Statistics-Information Bulletin of the World Fire Statistics Centre
- o Fire Research Needs (Rand-1976)
- o America at Risk-America is Burning (FEMA-2002)
- o Fire Research-Linking Past-Present-and Future Data

Video:

- o Regensburg Fire Department - the documentary - People in our city
- o Seconds From Disaster King's Cross Fire

Module 2 (Week 4): Forum Assignment:

After completing the Module 2 reading assignments and after viewing the video presentations, discuss how research and data have impacted today's fire departments. Be sure to provide a historical perspective. Please provide substantive responses to the posts of at least TWO of your fellow students.



5 & 6

Objectives:

1. Describe the impact of psychology in assessing fire victimology.
2. Synthesize the risk and protective factors that impact survival in emergencies.
3. Demonstrate an understanding of human behavior in fire incidents.

Readings for Week 5 & 6:

- o Fighting Fire with Psychology (2012)
- o Risk and Protective Factors that Impact Survival in Emergencies—The Time Has Come for an Upgrade in Preventive Emergency Population Behavior (2008)
- o Understanding Mass Panic and Other Collective Responses to Threat and Disaster (2005)
- o Best Behaviors-The Need to Expand Research on Human Behavior in Fire Safety and Prevention (NFPA-2015)
- o A Selective Historical Review of Human Behavior in Fire (2002)
- o Burning-Desire-Steps Toward an Evolutionary Psychology of Fire Learning (2006)

Video:

- o The Risk Perception Gap: David Ropeik at TEDx Walden Pond
- o Trauma psychologist Rob Gordon talks about disaster preparedness

Module 3 (Week 6): Paper Assignment:

Prepare a 4 page (500-750 word) Reaction Paper following the format provided addressing the Module 3 readings. Be sure that you address fighting fire with psychology, risk and protective factors that impact survival in emergencies, understanding mass panic and steps toward an evolutionary psychology of fire learning.

7 & 8

Objectives:

1. Describe the impact of civilian fire fatalities.
2. Synthesize life risk analyses in fire deaths.
3. Demonstrate an understanding of the evolution of a disaster framework for assessing crisis.

Readings for Week 7 & 8:

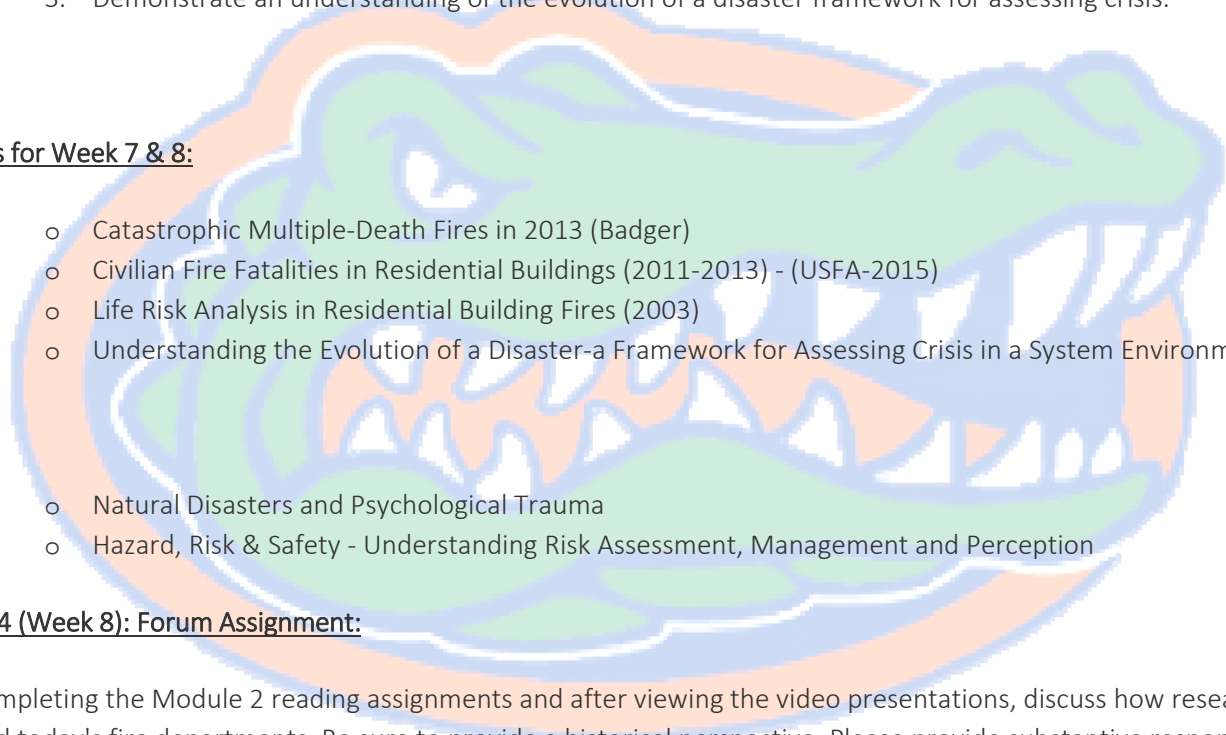
- o Catastrophic Multiple-Death Fires in 2013 (Badger)
- o Civilian Fire Fatalities in Residential Buildings (2011-2013) - (USFA-2015)
- o Life Risk Analysis in Residential Building Fires (2003)
- o Understanding the Evolution of a Disaster-a Framework for Assessing Crisis in a System Environment (FACSE)- (2012)

Video:

- o Natural Disasters and Psychological Trauma
- o Hazard, Risk & Safety - Understanding Risk Assessment, Management and Perception

Module 4 (Week 8): Forum Assignment:

After completing the Module 2 reading assignments and after viewing the video presentations, discuss how research and data have impacted today's fire departments. Be sure to provide a historical perspective. Please provide substantive responses to the posts of at least TWO of your fellow students.



9 & 10

Objectives:

1. Describe the cognitive behaviors in fires and other life-hazard incidents.
2. Synthesize the risk and protective factors that impact survival in emergencies.
3. Demonstrate an understanding evacuation behavior.

Readings for Week 9 & 10:

- o Cognitive Correlates of Improvised Behavior in Disaster Response-The Cases of the Murrah Building and the World Trade Center (2014)
- o Predicting Emergency Evacuation and Sheltering Behavior-A Structured Analytical Approach (2006)
- o Simulation of Staff Evacuation Behavior in Plant Fire Emergencies (2014)
- o (CRS) Nursing Home Recent Fires Highlight (2004)
- o Fires in Health Care Facilities-NFPA (2013)
- o Twelve-Fatality Nursing Home Fire (USFA) (1989)

Video:

- o Human Behavior During a Fire Alarm
- o Fireland

Module 3 (Week 6): Paper Assignment:

Prepare a 4 page (500-750 word) Reaction Paper following the format provided addressing the Module 5 readings. Be sure that you address improvised behaviors, predicting emergency evacuation & sheltering behavior, and staff evacuation behaviors.

11 & 12

Objectives:

1. Describe sustainable building design.
2. Synthesize the interaction between occupants and fire alarm system.
3. Demonstrate an understanding of the contributing factors to firefighter line of duty deaths.

Readings for Week 11 & 12:

- o Foundation Sustainable Building Design Symposium Proceedings Final (NFPA-2012)
- o OSHA Fire Service Features of Buildings and Fire Protection Systems (2015)
- o The Interaction Between Occupants and Fire Alarm Systems in Complex Buildings (2000)
- o Courage to Be Safe-Everyone Goes Home-A Look Inside the Program (2010)
- o Contributing Factors to Firefighter Line of Duty Death (2006)
- o Firefighter Fatalities in the United States in 2014 (USFA-2015)

Video:

- o Creating Fire Safe Communities with Balanced Design
- o Hearing: United States Fire Administration Priorities
- o Chicago Fire Department - Everyone Goes Home
- o Charleston 9: The Ultimate Sacrifice

Module 4 (Week 8): Forum Assignment:

After completing the Module 6 reading assignments and after viewing the video presentations, discuss the importance of sustainable building design and fire systems. Include in your discussion whether you believe there is a connection between building design and Firefighter safety. Please provide substantive responses to the posts of at least TWO of your fellow students.

Grading Policies:

The grade is based on a point system. You divide the total number of earned points into the total amount of points available to determine your grade. A grading rubric for the final project is under the Resource Tab on the course.

Assignment	Points or percentage
Paper Assignments (3) – 100 points each discussion	300 points
Forum Discussions (3) – 50 points each assignment	150 points
Final Course Paper – 150 points	150 points
Total Grade	600 points

See <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> regarding current UF grading policies.

Late Assignments and Discussion Posts

- Assignments 48 hours late will receive a 10% deduction in their grade.
- Assignments more than 48 hours but less than 30 days late will receive a 20% deduction in their grade.
- Assignments more than 30 days late but submitted during the semester will receive a 50% deduction in their grade.
- Discussions more than 48 hours late will receive a 25% deduction in their grade.
- Discussions more than 48 hours later will receive a 50% deduction in their grade.

Please note that any student have less than 75% of their work complete for the semester cannot earn an “I” contract. If you have 75% of the work complete, you can propose an I contract to the instructor.

It is your responsibility to keep your instructor informed at all times. The instructor does have the right under extenuating circumstances with proper notification to assist the student by extending the above time requirements.

Grading Scale

A = 93.0 to 100%	C = 73.0 to 76.9
A- = 90.0 to 92.9	C- = 70.0 to 72.9
B+ = 87.0 to 89.9	D+ = 67.0 to 69.9
B = 83.0 to 86.9	D = 63.0 to 66.9
B- = 80.0 to 82.9	D- = 60.0 to 62.9
C+ = 77.0 to 79.9	F = below 60

Passing Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	.67

Evaluation process:

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three

Weeks of the semester, but students will be given specific times when they are open.

Summary results of these assessments are available to students at

<https://evaluations.ufl.edu>.

