FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	FES 3781
COURSE TITLE:	Fire-Related Human Behavior
PREREQUISITE(S):	None
COREQUISITE(S):	None
STUDENT ADVISING NOTES:	Junior Level Status or Above
CREDIT HOURS:	3
CONTACT HOURS/WEEK:	3
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	3
Laboratory:	
Other _____:	
FACULTY WORKLOAD POINTS:	3
STANDARDIZED CLASS SIZE ALLOCATION:	30

CATALOG COURSE DESCRIPTION:

This course examines human aspects of the fire problem, including research and analysis of the problem and related issues in residential properties, wild-land fires, assisted living/group home situations, commercial/industrial settings, and multiuse high-rise buildings

SUGGESTED TEXT(S):	Fire-Related Human Behavior Course Guide, National Fire Academy, Death Rate Trends: An International Perspective, U. S. Fire Administration
IMPLEMENTATION DATE:	Fall Term, 2006
REVIEW OR MODIFICATION DATE:	Spring Term, 2007 (20072)

COURSE TOPICS	CONTACT HOURS PER TOPIC
I. Fire-Related Aspects of Human Behavior	**2**
A. Compare fire death rates in the United States with rates in other industrialized nations.	
B. Identify fire-related factors that differ among the United States and other industrialized nations.	
C. Identify the populations, structures, and communities at high fire risk.	
D. Increase student interest in all aspects of fire-related human behavior	
II. Research	7
A. Identify techniques that appeal to emotion instead of reason.	
B. Differentiate between the experimental and correlational methods.	
C. Identify the factors that affect the outcome of an experiment.	
D. Identify the factors that affect the results of correlational analysis.	
E. Describe the different types of correlational analysis.	
F. Differentiate between valid and invalid research conclusions.	
III. Systems Models	6
A. Explain, with specific examples, how the performance of people depends on the characteristics of buildings and fire protection features.	
B. Explain, with specific examples, how the performance of buildings and associated fire protection features depends on the behaviors of the people who design and occupy the buildings.	
C. Name two characteristics of hard systems approaches that can deceive naive users.	
D. Describe the two ways in which hard and soft systems approaches differ, and how these differences make the various types of models more useful or less useful for different types of problems.	
E. List the two ways that hard systems models help us examine the acceptability of egress routes from buildings.	
F. Explain the faulty assumption that reduces the validity of the lane model of evacuation capacity and the characteristics of human movement that make this assumption incorrect.	
G. List two sources of assumptions used in the current method for calculating exit capacities in the model codes.	
H. Explain why a simple linear model of exit capacities is less valid than the effective width model and state how researchers discovered its inaccuracy.	
I. Identify the source of the effective width model. Describe an important limitation to the accuracy of the effective width model.	
J. List two computer models that use information about building occupants to help predict overall systems (building) performance during fires. Describe one important way in which these two models differ.	
K. Explain the logical basis for goal decomposition, and list three goal-based systems approaches that use this technique.	

COURSE TOPICS | CONTACT HOURS PER TOPIC

IV. Residential Fire in a Single-Family Dwelling 6

A. Describe how at least two factors increase fire risks for people who live in low-income neighborhoods.
B. Explain how the hindsight bias affects how people assign blame for disastrous fires.
C. Correctly answer whether the following statement is true: "Young children think much the same way as adults; they just don't have as much knowledge." Explain how differences in cognitive abilities affect how children learn about fire safety and provide one example.
D. Describe how the concept of action schema can help explain why children can behave irrationally in fires.
E. Describe three differences in the way that men and women tend to respond to fire emergencies.
F. Explain why people seem complacent in their acceptance of remote risks. Provide at least one fire safety example.
G. List three factors that tend to increase the likelihood that firefighters will experience posttraumatic stress reactions.
H. Describe the representativeness bias and provide one fire safety example.
I. Describe the availability **bias** and provide one fire safety example.
J. Explain why passing an ordinance or publicizing a hazard often is insufficient to elicit much of a response from the public. Describe the best way to overcome these obstacles in low-income neighborhoods.

V. Wild-land/Rural Fire 6

A. Identify the three phases of human response to a fire and the three environmental factors that influence information processing during each stage.
B. Identify the three types of judgment heuristics that affect risk perception.
C. Explain how an individual or group could use a rational decision-making model when a significant fire threat confronts it.
D. Explain how bounded rationality affects human judgment and decision-making.
E. Explain posttraumatic stress (PTS) and how debriefing serves as an intervention to deal with PTS.
F. Describe the differences between **acute stress,** delayed stress, and cumulative **stress** that a firefighter would exhibit as a result of a critical incident.

VI. Board-and-Care Home Fire 6

A. Provide examples that show how roles influence people's views of fire safety. Provide at least one example of role conflict relevant to fire safety.
B. Explain why policies intended to prevent fires sometimes can increase risk. Explain how a policy that prohibits residents from smoking and a law that requires sprinklers in existing businesses can fit this pattern
C. Provide an example in which emergency procedures that are suitable in one setting are inappropriate in another.

COURSE TOPICS | CONTACT HOURS PER TOPIC

D. Provide an example of how people tend to use familiar routes of egress during fire emergencies.

VII. Commercial/Industrial Fire — 6

A. Identify the four attributes and characteristics of group behavior and explain why the actions portrayed in the scenario are consistent with the four attributes and characteristics.
B. Explain how physical setting characteristics influence human response in the scenario provided.
C. Identify the motivations that prompt people to start fires.
D. Describe how fire affects communities, including the impact on community business.
E. Explain why code enforcers sometimes are hesitant to use their judgment in enforcing fire codes flexibly, including recent innovations in codes that help enforcers administer the National Fire Protection Association (NFPA) 101® standard *Life Safety Code*, flexibly.
F. Describe the three economic factors that must be present before property owners find it economically acceptable to comply with codes.
G. Describe the reasons why regulatory authorities can induce compliance for economic reasons even when compliance is unacceptable economically.
H. Describe an approach that enforcers can use to encourage compliance with codes even when compliance is not in the best economic interest of property owners.
I. Name the two things that must happen before people will take appropriate action in response to hearing an alarm signal.

VIII. Multi-Use Occupancy (High-rise) Fire — 6

A. Describe at least two ways in which multiple occupancies in a large building can interact to create problems related to human behavior.
B. Explain diffusion of responsibility and describe the classic social psychology experiment that used a simulated fire emergency to test the theory.
C. Explain diffusion of responsibility and describe the classic social psychology experiment that used a simulated fire emergency to test the theory
D. .Explain what the term convergence clusters means.
E. Correctly answer the question, "Is there evidence that shows that people easily awaken to the smell of smoke?"
F. Discuss the problems associated with protecting people with disabilities during fire emergencies. Explain why it can be difficult to identify such people and why they may not want to be identified.
G. Describe at least two human behavioral issues associated with the use of elevators to evacuate people from large buildings.
H. Explain why verbal alarm messages evoke faster responses from building occupants than traditional nonverbal alarm signals. Explain why the content and timing of the messages must be planned carefully

Florida State College
At Jacksonville

Course Learning Outcomes & Assessment
For All College Credit Courses

NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

Section 1

COURSE PREFIX AND NUMBER: **FES 3781**

SEMESTER CREDIT HOURS: **3**

COURSE TITLE: **Fire-Related Human Behavior**

Section 2

TYPE OF COURSE: (Click on the box to check all that apply)

- ☐ **AA Elective**
- ☐ **AS Required Professional Course**
- ☐ **College Prep**
- ☐ **AS Professional Elective**
- ☐ **AAS Required Professional Course**
- ☐ **Technical Certificate**
- ☒ **Other BAS required professional course**
- ☐ **General Education: (For General Education courses, you must also complete Section 3 and Section 7)**

Section 3 (If applicable)

INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

- ☐ **Communications**
- ☐ **Social & Behavioral Sciences**
- ☐ **Mathematics**
- ☐ **Natural Sciences**
- ☐ **Humanities**

Section 4

INTELLECTUAL COMPETENCIES:

- ☒ **Reading**
- ☒ **Speaking**
- ☒ **Critical Analysis**
- ☒ **Quantitative Skills**
- ☐ **Scientific Method of Inquiry**
- ☒ **Writing**
- ☒ **Listening**
- ☐ **Information Literacy**
- ☒ **Ethical Judgment**
- ☒ **Working Collaboratively**

Section 5

	LEARNING OUTCOMES	METHOD OF ASSESSMENT
• 1	Compare fire death rates in the United States with rates in other industrialized nations	exam
• 2	Differentiate between the experimental and correlational methods.	exam
• 3	Explain, with specific examples, how the performance of people depends on the characteristics of buildings and fire protection features	exam
• 4	Explain how the hindsight bias affects how people assign blame for disastrous fires.	exam
• 5	Identify the three types of judgement heuristics that affect risk perception	exam
• 6	identify the motivations that prompt people to start fires	exam
• 7	List two reasons why people are not good a decisions that involve "gambles"EXAM	Exams
• 8	Explain what the term convergence clusters means	exam

Section 6

Name of Person Completing This Form: Richard Nelson Date: 8-23-05