

## Executive Summary-UWF-B.A.S.F. Grant

### Introduction

The University of West Florida's Engineering and Computer Technology/ Construction Department is grateful for the opportunity to be a part of the grant process in conjunction with B.A.S.F to establish quality continuing education courses for the construction industry.

The deliverables on this grant are components of a comprehensive system that will be used to augment access and flexibility of education and training opportunities through online and mobile delivery of workshops and classes. The course delivery will provide a new system, which includes system outlines, working papers, individual media assets (presentations, video, animations, simulations, web-based instruction shells) that will be integrated together after the conclusion of the grant to provide professional development opportunities. Our objective is to provide more of technical level as well as a higher level of interesting and interactive courses. We are also outlining a method which allows the student to review provided information at any time during the course through a module delivery. (See example below.)



### Chapter 11: Accessibility

Chapter 11 of the *Florida Building Code* involves **Accessibility**. In this course, you will learn about the requirements of Chapter 11. This course help you design, inspect or project manage aspects of Chapter 11.

In this course you will explore the following topics:

#### General Information

- Key Definitions
- Purpose

#### Vertical Accessibility

- Ramps
- Stairs
- Elevators and LULA's

#### Site Information

- Route from site to structure
- Parking
- Curb ramps

#### Interior Components

- Restrooms
- [Doors](#)
- Signage

You will see presentations which include video and simulations. If you haven't been through the course before, test your system to make sure that all of the technologies will work on your system. Select the "Check Your Technology" icon to make sure that everything works correctly on your system. If you run into problems, contact the UWF Support Center at XXX-XXX-XXXX or [construction@uwf.edu](mailto:construction@uwf.edu).



To start the lesson, select the first link (General Information). Work through the lessons from beginning to end.

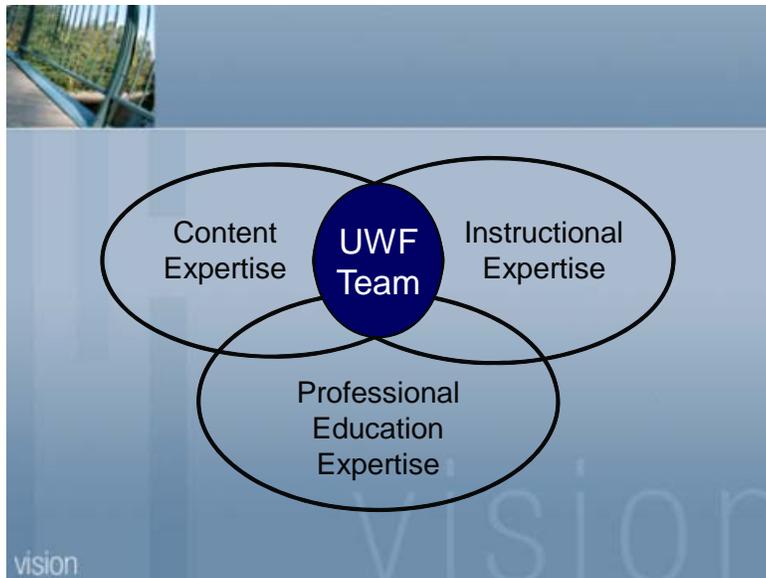
If you have questions about the lesson, post them to our discussion board and review Frequently Asked Questions.

The overall goals of the courses provided will be to create an alignment of DCA course content to updated technical information provided by individuals and organizations who assist with the update process. **All courses below are NEW courses and content.** The list below shows some existing DCA courses and the current status of our updating process of those courses.

Course (* designates rework of a DCA outline)	Status	Notes
* Advanced: Accessibility - 2 Hrs	Near completion – new content	Reshoot video: latch/strike side, hinge side, door stop clear width, door width and how to measure it. Maneuvering requirement: hardware lever, light, closer definitions etc.
Advanced (Accredited Course) 5,6 and 7	Presentation completed (updating per new code) – developing animation storyboard and narration script	* Similar to Advanced: FBC Building/ Structural Summary
ASC 7 Windload	Presentation completed - developing animation storyboard and narration script	* Similar to Advanced: Structural/Wind Loads
Business Practices	Presentation completed - developing animation storyboard and narration script	
Florida Laws and Rules for Building Code Professionals	Presentation outline in development	
Ethics for Building Code Professionals	Presentation outline and storyboarding in development; converting to online delivery format	New requirement
Job Site Safety	Presentation outline and storyboarding in development; converting to online delivery format	Working w/UWF Health and Safety and DEP to offer a new format for contractors for environmental safety and requirements
Workers Compensation * Advanced: 2004 FBC Mechanical/Energy Summary	Presentation outline in development purchased CD and Presentation completed	completing outline converting to online format
Bldg. Code Training Basic Codes	purchased DCA CD to ensure we are following objectives	re-working outline and creating completed course objectives

## Goals and Vision

The partnership among three groups: University of West Florida (UWF) Engineering and Computer Technology, T. Eric Stafford & Associates, LLC (TES), and UWF's Continuing Education Division offers unique advantages for the creation and delivery of *Florida Specific* distance learning courses that promote continuing and professional development opportunities to members of the construction industry. Each of the three groups brings different, but essential, strengths to facilitate an online/distance learning program. This proposal utilizes the strengths of the partners at an extremely high level, providing a high quality professional learning experience.



Technology is an area that we feel will enhance on-line learning courses. Our team is exploring delivery through Smartphone and PDA. Our graduate program currently delivers their program to the military via PDA.

## The Future

- Delivery via web or mobile devices (must have SD Chip or access to Internet)
- Additional Courses



A close-up photograph of a hand holding a silver stylus, pointing at a tablet device. The tablet screen is lit up and shows some graphical elements. The background is blurred.

vision

## **Summary of Instructional Strategies and Techniques**

All courses will have built-in methods of ensuring that a student cannot “fast-forward” through a course. Video or animation presentations require completion of the segment before the participant can move to the next system (e.g., the forward arrow appears after the segment is finished). Integrated interactive activities (e.g., simulations) will be used to maintain participant interest in the information. Course directions will include the information that quiz responses are tracked for quality assurance and a certificate will not be provided unless the participant passes the final assessment. The final assessment will not be available until the course content has been completed.

In regard to the notion that courses shall contain a timer to track attendees’ activity, our goal is to produce appropriate length, quality content courses to prepare BOAF members to meet the challenges of their jobs while, at the same time, meeting their professional obligations regarding continuing education credit. Although we understand the concern and the intent of providing a timer, this method cannot effectively monitor participant engagement in the learning environment. Each participant will have his/her own individual level of expertise that will determine the average length of time required to complete a given course. To ensure that participants actively engage in the learning environment, instructional strategies that require participant interaction will be used throughout the course. Course materials will be evaluated by subject matter experts and instructional designers to ensure that the content is equivalent to the stated time period. As part of the evaluation process, a pilot study with 3-5 target members of the participant audience will be conducted to evaluate course time requirements. Modifications will be made to the course materials based on the results and feedback.

Embedded quizzes will be integrated into the instructional materials after each topic area. Participant responses to the quizzes will be tracked for quality assurance and improvement. In addition, responses will be time-stamped to evaluate participant progress through the course. The final assessment will be randomly generated from a course test bank. To receive credit, participants must correctly answer 80% of the final assessment. If they do not, they will receive corrective feedback and returned to the course for remediation. They may take the final assessment multiple times, but will have to meet the performance standard of 80% before receiving their certificate. The system will automatically save the quiz data to a database for review and evaluation by program evaluators.

The research and development attributes of the University, specifically in the area of online learning lies at the heart of the partnership that we have proposed. The team members (see attached for a biographical sketch of each) provide a depth of expertise in the area of online learning from instructional strategies to media development. Team members bring the use of leading edge technologies to the course design, development, and implementation. In addition, we also have the ability to deliver content through multiple delivery methods that include technologies of personal digital assistant (PDA), Smartphone, and synchronous distance environments.

## **Course Development and Evaluation**

Course design and development will be conducted by UWF. To further enhance the quality of the courses, will include extensive subject matter involvement in the formative evaluation of the courses to ensure that the course content is accurate, appropriate, and of high quality.

The partnerships between T. Eric Stafford Associates (TES) and the faculty in the Department of Engineering and Computer Technology combines the best aspects of practical, technical and instructional resources. TES has been involved in the development of the *Florida Building Code*, through work with SBCCI/ICC and as a consultant, since its inception in the late 1990s. TES has provided training at hundreds of venues on various topics related to the *Florida Building Code*. The training will also incorporate peripheral issues such as interpretations from BOAF in addition to Declaratory Statements from the Florida Building Commission.

The faculty in the Department of Engineering and Computer Technology has varied expertise in the construction profession and the design, development, and implementation of online instruction, especially in terms of multimedia integration and delivery via multiple systems (e.g., PDA).

Courses will be the property of the University of West Florida for its use and distribution.

## **Participant Support and Access**

The Department of Engineering and Computer Technology and the Division of Continuing and Distance have developed a comprehensive student support system designed to facilitate participant success in a variety of learning environments. As part of this support system, participants will

- Be able to obtain copies of certificates for courses completed within the last calendar year.
- Have their successful completion of courses reported to the approving boards, with appropriate CEU information.
- Have access to a participant support system that include: registration technical help desk, content clarification, bulletin board for question and answers to content questions, and frequently asked question area for both technical and content assistance. In addition, participants will have access to technical and content assistance via phone and fax.

## **Conclusion**

Through the resources of this grant, UWF has developed multiple assets that can be used and re-used in providing high-quality instruction to members of the construction industry. These resources will provide a foundation for enhanced professional development designed to support construction-related professionals.