

Design Plan

Emergency Action Plan & Preparedness Training for Roane State Community College and Pellissippi State Technical and Community College

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IT-578 Development Team

University of Tennessee

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I. Executive Summary

To fulfill requirements established by the Office of Safety and Health Administration (OSHA), the University of Tennessee has developed a self-paced, web-based training program for the employees of Pellissippi State Community College (PSCC) and Roane State Community College (RSCC). In order to increase awareness of safety issues in the workplace, all faculty and staff at PSCC and RSCC will be required to successfully complete training modules on an annual basis covering the following topics: (1) emergency preparedness; (2) safety hazards; (3) general safety rules; (4) emergency procedures; and (5) awareness of emergency situations, employee responsibilities, and actions to be taken to ensure safety for all individuals.

The online training will be delivered via Desire2Learn (D2L), RSCC's learning management system. The training will be accessible through multiple modalities, including campus computers, personal tablets, and mobile devices. The content will be designed by using audio, video, and still images to present the necessary material. All content will be in adherence with the American Disability Act's (ADA) policies. Participants will navigate modules designed to present content and assess knowledge in the previously mentioned topics. This program will be stored and maintained on the RSCC learning management system, D2L.

Assessment will be aligned to the instructional outcomes of each module. Participants will be required to answer multiple choice, short answer, true/false, and matching questions. Additionally, participants will be presented with scenarios of potential, real-world emergency situations and will be required to provide the appropriate actions needed to safely resolve the situation.

II. Project Overview, Need and Goal

A. Project Instructional Goal

The instructional goal of this project is to provide quality self-paced, web-based training and quick reference help information about Pellissippi State Community College/Roane State Community College's Emergency Action Plan. The goal of these training modules is to increase awareness of issues one might face at work to prevent incidents and injuries on the job.

B. Designer/Developers

This training design/development proposal is being submitted by Dr. Susan Sutton and the class participants in the *IT-578 Instructional Media Development* course offered by the Instructional Technology online masters program at the University of Tennessee, Knoxville in the Spring of 2015 (hereafter referred to as the *IT-578 Development Team*).

C. Stakeholders

The key stakeholders for this project include:

- All faculty, staff, and administration at Roane State Community College including the satellite campuses.
- All faculty, staff, and administration at Pellissippi State Community College including the satellite campuses.
- Darrell McGraw, Environmental Health and Safety Compliance Manager

For this project, the *IT-578 Development Team* will interact primarily with Darrell McGraw who will serve as the subject matter expert (SME) for training content. Depending on the arrangements, the team may also interact with RSCC/PSCC employees during the usability testing of the training prototype.

D. Learner Analysis

The primary learner audience for this training are all employees at Roane State and Pellissippi State Community Colleges, including all satellite campuses. It is desired that this training be able to be used as an open educational resource, thus a secondary learner audience would be any similar educational institutions receiving state and/or federal funds in the United States. For the purpose of analysis, we assume the primary learner audience as an appropriate representative sample for the secondary learner audience.

The primary audience consists of employees in the following types of job roles:

- Executives: president, vice president, executive assistants
- Faculty: professors, deans, librarians
- Administrative and Professional Staff: directors, managers, supervisors, coordinators, specialists, counselors, buyers, coaches, bursar, etc.
- Clerical Staff: secretaries, accounting clerks, mailroom, cashiers, shipping & receiving, technicians, etc. (some supervisory here)

- Support Staff: technology support, security officers, library assistants, etc.
- Skilled Staff: maintenance workers, grounds crew, custodial, etc.

This represents a wide diversity in job duties, skills/qualifications and supervisory responsibilities. While some elements of emergency preparedness will be the same for all staff, other elements will differ depending on job roles and responsibilities. In addition, as this is an annual training, some staff will already be familiar with the material. Learning materials should reflect this variety of skills and experience, and be both cognitively accessible (reading, oral comprehension, and writing level) to employees with the lowest skill levels while still respectful to those with the highest skill levels. In addition, it is noted that not all employees have English as their native language and that English language fluency may vary. For the purposes of this training, minimal English language cognitive requirements for all employees/learners are assumed to be as follows:

- Reading & Oral comprehension: 6th grade functional level
- Written Expression: 4th grade functional level

This diversity may also reflect a wide variance in employees' skills and access to technology. For this training, the following minimal technological skills and access are assumed:

- Broadband internet access via desktop or tablet (provided by the workplace).
- Ability to:
 - access web pages and navigate via web links via web browser
 - complete and submit online web forms (quizzes)
 - log into and navigate an online learning management system (like D2L)
 - play video and audio files in common formats, and access pdf documents

As a recipient of state and federal funding, RSCC, PSCC and similar institutions are required to comply with national and state level affirmative action and diversity requirements. This implies that targeted learners will represent a cross section of gender, race, ethnicity, culture, and ability levels similar to that of the U.S. population, limited only by the skills and qualifications listed above. State and federal guidelines require training to meet the Americans with Disabilities Act requirements for accessibility, or provide a reasonable alternative. In addition, materials should reflect a respect for this wide range of employee diversity in any images or real-life contexts (scenarios) presented.

Lastly, as RSCC and PSCC and similar institutions receiving public funds are "open campuses," almost all employees will have some contact with students and the public. It should be assumed that all employees will need training in ensuring public and student safety in an emergency. In addition, employees will also need annual training in the established guidelines for speaking with the press (ex: at PSCC employees are not to speak to the press at all - should refer all to public relations dept.) and/or the public during and regarding emergency events at their place of employment.

E. Performance and Learning Context Analysis:

Performance environment

- *Physical Characteristics*

While the broad performance context for emergencies would be the entire campus (or satellite), each employee would typically expect to carry out actions in just one or two buildings or settings specific to their job roles. Most actions in an emergency will require speaking and listening, as well as physical movement (walking quickly to a designated place, retrieving equipment, making a call, talking to others, etc.) Some reading (emergency maps or procedures) may be required to aid recall. Emergencies will make performance at speed a priority and is likely induce stress in employees and those with whom we interact.
- *Social Support or Interaction*

In the performance environment, depending on job roles and situations, employees may or may not have face to face access to peers for social support in an emergency. In almost all cases, however, employees will be able to call for assistance, and/or draw from expertise from students or others nearby. In some cases, however, others may create barriers due to panic, or lack of information.

Learning environment

- *Physical Characteristics*

Training materials will be delivered via an online learning management system incorporating links to content materials, online quizzes, an asynchronous discussion board and links to additional resources (external web links and linked documents). Content materials will incorporate digital text, images, video and audio files to deliver information. Employees will access the LMS via desktop computers or tablets in their normal work setting, and generally will have the ability to visit or examine workplace items relating to training (exit maps, emergency equipment, etc.) as desired. Training is self-paced, with no time limits or other stressors planned other than those set by every day employee work constraints.
- *Social Support or Interaction*

While the learning environment will not prohibit employees from accessing offline peer supports or consultation with experts, it is assumed that the proposed online training will be completed by each employee independently, as best fits his or her individual work schedule and technology access. The learning environment will include a tool for peer interaction (asynchronous discussion) as well as e-mail links for content and technical support personnel.

- *Personnel or time constraints*
To minimize employee time away from primary work activities, training should require only about 30 minutes to complete. In addition, there is no funding for an online facilitator, so training should be designed to require little to no expert facilitation, and little technical support. Information on accessing technical support for the LMS as well as content-related support should be included in course materials.
- *Compatibility with learner needs*
While safety, financial and time constraints lead to an actual performance and planned learning environments that are significantly different, we feel that the learning environment is sufficient to meet the project goal. As much as possible, training material design will use photos, video, and real-life scenarios to help learners to apply learning in the performance context. Due to the disparity between the performance and learning environments, however, this training should be partnered with additional training, such as emergency drills in the performance environment(s), in order to assure learners' ability to apply knowledge in context.

III. Instructional Treatment

A. Theoretical Foundation

Due to the short and non-facilitated constraint for this training, design will be based overall in an instructivist approach, which is based in both behavioral and cognitivist learning theories (Larson & Lockee, 2014). Within this approach, however, design will integrate principles of andragogy (adult learning) as much as possible. This includes aids to self-directed learning, incorporation of real-world applications of knowledge and learning materials that respect adult learners' diversity (accessibility, reading level, tone, etc.) (Knowles, 1980).

B. Learning Outcomes

The learning outcomes for the proposed instruction include:

1) Terminal Outcome:

Upon successful completion of annual emergency action plan training, faculty, staff, and administration will have an awareness of potential emergency situations and possess the knowledge and skills necessary to ensure the general safety of self and others in actual emergency situations.

2) Enabling Outcomes:

On completion of this course, participants will be:

- a. familiar with the essential elements of **Emergency Preparedness**. (module 1)
- b. able to recognize and respond to potential **safety hazards** found in the workplace. (module 2)

- c. familiar with **general safety rules**. (module 2)
- d. familiar with **Emergency Procedures**. (modules 3 & 4)
- e. aware of potential **emergency situations** and the **responsibilities** and **actions** to be taken to ensure the general safety of self and others. (modules 3, 4 & 5)

3) Objectives:

Outcome 1: After completion of this course, participants will be familiar with the essential elements of **Emergency Preparedness**.

Learning Objective(s) 1:

After completion of this module faculty, staff, and administration will be able to:

- complete a ten-question quiz with 80% accuracy.
- identify at least 3 critical things they should know about the emergency action plan for their institution/campus
- identify where a copy of your institution's Emergency Action Plan resides
- identify who their campus contact is.

Outcome 2: After completion of this course, participants will recognize and respond to potential **safety hazards** found in the workplace.

Learning Objective 2:

- Given a list of 20 potential safety hazards faculty, staff, and administration will be able to choose five potential safety hazards they have seen on their campus.

Outcome 3: After completion of this course, participants will be familiar with **general safety rules**.

Learning Objective 3:

- After completion of this module faculty, staff, and administration will be able to complete a ten-question quiz with 80% accuracy.

Outcome 4: After completion of this course, participants will be familiar with **Emergency Procedures**

Learning Objective(s) 4

After completion of this module faculty, staff, and administration will be able to:

- identify the correct **Evacuation** procedures and emergency escape **route** assignments for their institution.
- identify the correct procedures for **lockdown** procedures and assignments.
- identify the correct procedures for **severe weather**.
- identify the correct procedures when there is a **bomb threat** on campus

- identify the correct procedures when there is an **armed intruder/active shooter** on campus.

Outcome 5: After completion of this course, participants will be aware of potential **emergency situations** and the **responsibilities** and **actions** to be taken to ensure the general safety of self and others.

Learning Objective(s) 5

After completion of this module faculty, staff, and administration will be able to:

- order the steps in the process for **calling 911**.
- identify the correct procedures when there is a **fire/explosion** in the building.
- identify the correct procedures if someone has been **injured** (bleeding, unconscious, having a seizure, etc.)
- identify the correct procedures when there is an **energy/utility outage**
- identify the correct procedures when there is a **terrorist attack**.
- identify the correct procedures when there is a **chemical spill** on campus

C. Teaching and Learning Strategies

A variety of instructional methods will be used in the Emergency Preparedness Action Plan training:

- **Presentation:** Content for each learning module will be presented to the learner via learning management system.
- **Demonstration:** Real life situations will be addressed in the training that are applicable to the learner's work environment.
- **Problem-Based Learning:** Quizzes will be used as assessment for application of knowledge.
- **Graphical Illustrations:** Images and video will be used to reinforce content of the learning outcomes.
- **Audio:** Voice-over narration will be used to support on-screen text.

The teaching and learning strategies to be used in the proposed instruction will be determined by the *IT-578 Development Team*, and will be submitted for approval to Darrell McGraw, Environmental Health and Safety Compliance Manager.

D. Technology

The training will be developed and initially delivered online via RSCC's learning management system Desire2Learn with tentative plans to migrate to the open course version of this same LMS system at a later date. Learners will be able to access training via campus computers or personal tablets. Content in the training module will be created using audio, video, and still images.

As there are audio components to the training, learners will use their personal headphones or earbuds as needed or they may request a loan from RSCC's Center for

Teaching Excellence or PSCC's Information Technology Support Services while completing training on campus.

The technology to be used in the proposed instruction will be determined by the *IT-578 Development Team*, and will be submitted for approval to Darrell McGraw, Environmental Health and Safety Compliance Manager.

The *IT-578 Development Team* will use the following instructional technologies in developing prototypes for review by Darrell McGraw and usability testing:

- MS Office software (Word, PowerPoint and possibly Excel)
- Photoshop or other image editor
- Camtasia screen capture & video editing software
- Final Cut Pro or iMovie video editing software
- Audacity, GarageBand or other audio editing software
- D2L learning management system via a 508 compliant template
- Any additional software identified by the Team

The instruction will be produced in a modularized format as discrete tasks. The hosting and storage of the instructional materials will be provided by Roane State Community College's Learning Management System – BrightSpace by Desire2Learn. The instructional materials will be accessible from <https://elearn.roanestate.edu/d2l/login> The learner may choose to access the training via the learner's choice of three delivery options:

1. Via eLearning on the web utilizing "full-screen" desktop and laptop LMS platforms,
2. Via eLearning on the web utilizing "mid-sized" tablet and ultrabook LMS platforms,
3. Via face-to-face training delivered by Darrell McGraw.

Communication between the *IT-578 Development Team* and Darrell McGraw will be mediated by Dr. Sutton. The Team will communicate with Darrell by phone, e-mail, Adobe Connect, and face-to-face meetings and interviews.

E. Assessment

Assessment to be used in the proposed instruction will be embedded within the learning management system. All assessment will be aligned to instructional content found in corresponding training module and will seek to promote higher order thinking skills through the application of Bloom's (Revised) Taxonomy. Each training module will link to a post-assessment quiz that will be comprised of a variety of questions including, but not limited to, short answer, multiple choice, matching, and true/false.

In Module 5, learners will be required to complete a post-assessment with an 80 percent mastery. If mastery is not achieved the first time taking a quiz, learners will be able to

retake the quiz until they earn at least 80 percent. Learners will be provided with questions regarding a variety of real-life emergency situations for which they will have to choose the best solution. Questions formats may include, multiple choice, multiple response, rank ordering choices, true/false, and/or matching.

F. Development Issues, Constraints & Resources

This section describes the development issues, constraints and resources for the project. Issues and constraints covered in this section include: content issues, schedule constraints, technical constraints, learner-related issues, and privacy and confidentiality constraints. This section also addresses the software, hardware and human resources to be used by the *IT-578 Development Team*, and any additional resources the designers feel may also be required.

- 1) **Content Issues** – The training to be developed will be designed for all RSCC and PSCC employees, it has the potential to be an exemplar for other community colleges in the TBR system. The differences in characteristics and needs within the primary learner audience should be considered in the design of the instruction, and it should be developed to be generic and modularized to facilitate reuse of the materials for other community college training purposes.
- 2) **Schedule Constraints** – The schedule for the development of the Emergency Action Plan training will be impacted by the semester-long course length of the *IT-578 Development Team*. Therefore, all prototypes to be produced by the IT-578 class will be reviewed by the client on an on-going and continuous basis and must be ready for usability testing by March 25th, just after the UTK spring break. The last class meeting of the IT-578 course is Wednesday, April 22, 2015, and therefore the final instructional materials will be formally presented to Darrell McGraw by the *IT-578 Development Team* on April 15th or the 22nd (Future versions of this design plan will include a detailed schedule.)
- 3) **Technical Constraints** – Dr. Susan Sutton is trying to make arrangements so the training modules will be hosted in D2L's OPEN Course system rather than the closed environment – RSCC's D2L Learning Management System – Momentum. Therefore all instructional materials will also be accessible via this technology. The following specific technical constraints and their implications for design are applicable to this project:
 - **Browser Constraints** – Some employees may experience complications due to outdated browsers that do not support RSCC's Learning Management System. If this problem should arise, instructions will be provided for employees to contact the helpdesk in order to have the browser updated.
 - **Design Format Constraints** – Employees unable to access training via LMS will be referred to Darrell McGraw for face-to-face delivery.

- *Graphics Constraints* – All graphics should be ADA compliant. Due to budget constraints, graphics, video, and audio used for content will be appropriately licensed for educational use and re-distribution as an Open Educational Resource. If desired material cannot be found, design team will create graphics, video, and audio to be used.
- *Design Constraints for Mobile Formats* – Training will be compatible with some mobile devices. To accommodate limits on bandwidth, data allowances and battery life, material, including video, will be chunked into smaller segments, and color options and photos may be limited. Learners unable to effectively access training under these limitations will be referred to Darrell McGraw for face-to-face training.

4) Learner-Related Issues – As noted in the learner analysis, there are a number of factors that vary significantly by learner, resulting from the wide variety of employees. If not considered in the design of the instruction, these factors can become issues that may impact learner engagement and motivation, as well as accessibility. A summary of learner characteristics and needs, along with the associated technical constraints, is presented in the following table.

Summary of Technical Constraints & Learner-Related Issues

Technical Constraint <u>OR</u> Learner-Related Issue	Description of Impact	Instructional Design Implications
(Technical) Browser Constraints	Some employee web browsers may not be supported by RSCC's LMS.	Provide helpdesk contact instructions for browser update, arrange for alternate computer or face to face training.
(Technical) Format Constraints	Due to language, technical skill, or ability barriers, some employees may struggle or be unable to access LMS-based training.	Materials should be ADA compliant and design should minimize complexity. Face-to-face training provided by the (safety compliance officer) as an alternative to the LMS.
(Technical) Graphic Constraints	Due to Open Educational Resource (OER) plans and budget constraints, graphics and video content must be appropriately licensed for OER use and re-use.	Designers will be required to verify licensing on all graphics and video used in training content. Resources will be listed in references.
(Technical) Mobile Format Constraints (Bandwidth, data allowances, battery life)	Limits on bandwidth, data allowances and battery life may inhibit designs featuring data-intensive formats and user interactivity.	Chunk material into smaller segments, limit color options & photos. Optimize training for mobile delivery while maintaining ADA compliance.

Technical Constraint <u>OR</u> Learner-Related Issue	Description of Impact	Instructional Design Implications
(Learner) Computer Literacy	Limited technical skills can limit employee's access and/or comprehension of training information.	Face-to-face training will be provided by the (safety compliance officer) as an alternative to the LMS.
(Learner) Language or Cognitive Skills	Low reading or writing levels and or low English language listening skills can inhibit understanding of training materials.	Design should minimize complexity in text and audio to approximately 6-8th grade functional English levels. Written tasks should be minimized.
(Learner) Low/No Vision	Can limit the readability of learning material for some learners. Employees with low/no vision must be able to access critical visuals.	Materials should be ADA compliant (accessible via screen reader) and LMS should provide capability to enlarge text. Where appropriate, provide audio that describes video content for blind and low-vision users.
(Learner) Color Blindness	If directions refer to colored text or screen items that are not visible to color blind individuals, it can inhibit understanding.	Design screens using color schemes that are generally visible to the color blind. Reference multiple characteristics when describing items (e.g., shapes, position).
(Learner) Physical Impairment (gross or fine motor)	Physical limitations can restrict access to the LMS or performance of certain functions within the LMS.	Provide online materials that are ADA compliant, with face-to-face training (provided by the safety compliance officer) as an alternative.
(Learner) Hearing impairment	The hearing impaired may have difficulty hearing or understanding oral instruction or information	All materials with audio elements should provide closed captioning or text alternative in compliance with ADA guidelines.
(Learner) Differing Job Roles and/or Experience Levels	Learners' job duties and experience levels with content vary widely. This may affect understanding of and motivation to complete training materials.	Provide contextual examples from a variety of job roles. Emphasize elements of content applicable to ALL employees. Emphasize importance of fluency in applying training content.

5) Privacy, Confidentiality & Image Licensing

- Individual course pass/fail information will be provided to the employee and supervisor to support each employee's success in the course
- Compiled course completions will be reported to OSHA as required by law
- All videos and images in course will be used with permission or under a creative commons license

6) Accessibility Considerations – To ensure that the training is accessible to the majority of learners, the training will adhere to the following universal design guidelines:

- Use ADA compliant HTML5 templates for page and text layout. Maintain color schemes that are generally visible to the color blind.
- Minimize design and navigation complexity, provide multiple navigational options, and 'chunk' materials into short segments to reduce cognitive and language barriers.
- Design should minimize complexity in text and audio to approximately 6-8th grade functional English levels. Written tasks should be minimized.
- Real-time visual and audio closed captioning for any video materials, as well as closed captioning for any audio-only materials.
- Text descriptions for any images to be supplied as "ALT" text for those requiring vision accommodations. A text file linked to video media or images containing details too long for the "ALT" text should be supplied.
- Reference multiple characteristics when describing items (not just color).
- If learners are unable to access materials effectively via the LMS, face-to-face training will be provided by the safety compliance officer as an alternative.

7) Resources

- The *IT-578 Development Team* will develop the training materials using MS Word and MS PowerPoint, and trial versions of the other software identified for use in the project (i.e., Camtasia, Final Cut Pro, iMovie, etc.). If changes are to be made after the final product review, RSCC will make arrangements for accomplishing those changes. Depending on where the training modules are housed, RSCC will also be responsible for posting the final materials to their website and will try to provide the *IT-578 Development Team* with a URL that team members can use to showcase their work for future potential employers.
- To limit work disruptions and facilitate efficient workflow, Dr. Sutton will coordinate communications between the *IT-578 Development Team* and Darrell McGraw.
- Darrell McGraw will be available for content and logistical consultation, and reviews. Darrell McGraw and Dr. Sutton may also identify individuals who would be available for consultation or photo/video shoots, or who would be willing to serve as test subjects for the usability testing of the prototype instructional materials.
- Additional content resources will be identified by Darrell McGraw.

IV. Evaluation Plan

The training materials will undergo evaluation both formatively (during design and development) and summatively (upon completion of development).

Formative: During the course of the design and development process, content reviews by subject matter experts, content field tests, and usability tests will be conducted to ensure that the product is accurate and meets the identified needs.

Summative evaluation will consist of a formal presentation of the final product by the Team to Darrell McGraw, and a review of that product by Darrell McGraw and Instructional Designers from RSCC Center for Teaching Arts and Technology.

Course effectiveness in achieving outcomes (results) will be evaluated after implementation through an analysis of Module five assessment results. In this module, learners will be given a variety of emergency situations and they will have to choose the best solution for a given scenario. Learners will be able to apply the knowledge and skills they have gained from the previous completed modules, and, in turn, show whether or not they actually acquired the overall course goal of having an awareness of potential emergency situations and possessing the knowledge and skills necessary to ensure the general safety of self and others in actual emergency situations.

In addition, participants will be asked to provide evaluative feedback via a survey upon completion of the course. Feedback will be analyzed and adjustments made to the course as needed and during annual updates. Further levels of Kirkpatrick's Evaluation Model are beyond the scope of this course.

Kirkpatrick's Four-Level Evaluation Model		
Level	What is measured	Possible plan for measurement
I.Reaction	Learner satisfaction with training	Non-graded survey/questionnaire
II. Learning	Learner knowledge and skills	Scenario situations in Module 5
III. Behavior	Learner application in real-life emergency situation	Observation of emergency drill or real-life situation
IV. Results	Learners' training impact on RSCC/PSCC goals	Reductions in injuries, deaths and/or property damage due to or in emergency situations.

The *IT-578 Development Team* will add additional plans for evaluation (possibly addressing one or more levels of the Kirkpatrick evaluation model, Kirkpatrick, 1998), following a closer analysis of this initial design plan.

V. Implementation Plan

Plans for implementation will be added at a later date, after the *IT-578 Development Team* has verified this design plan and further researched the project scope.

VI: References

- Huitt, W. (2011). Bloom et al.'s taxonomy of the cognitive domain. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved [2/6/15], from <http://www.edpsycinteractive.org/topics/cognition/bloom.html>
- Kirkpatrick, D. L. (1998). The four levels: An overview. Ch. 3 in *Evaluating Training Programs: The Four Levels*, 2nd ed. San Francisco: Berrett-Koehler.
- Knowles, M. S. (1980). *The modern practice of adult education. From pedagogy to andragogy*. Englewood Cliffs: Prentice Hall/Cambridge.
- Larson, M.B., & Lockee, B.B. (2014). *Streamlined ID: A practical guide to instructional design*. NY: Routledge/Taylor & Francis.
- Civil Rights Division, US Department of Justice (2009). "[42 U.S. Code § 12102 - Definition of disability, Americans with Disabilities Act of 1990, As Amended](#)". ada.gov.
- Henry, S.L. (Sept., 2005). Introduction to Web Accessibility. Retrieved from <http://www.w3.org/WAI/intro/accessibility.php>
- Sorensen, K. (2015). Accessibility for Online Course Content. Retrieved from <http://www.pcc.edu/resources/instructional-support/access/>
- Sorensen, K. & Amornchat, S. (2014). Online Accessibility Handbook. Retrieved from <http://www.pcc.edu/resources/instructional-support/access/documents/OnlineAccessibilityHandbook-loRes.pdf>

VII. Appendices

- **Appendix A – Detailed Content Outline for Client Review**
- **Appendix B – Resources Identified by Darrell McGraw**
- **Appendix C – Schedule**

- **Appendix D – Aligned Learning Outcomes, Instructional Strategies and Assessment Chart**
- **Appendix E – Media Plan and Justification Chart**

Appendix A – Detailed Content Outline for Client Review

Module 1: Emergency Preparedness and intro from Darrell

Outcome:

After completion of this course, participants will be familiar with the essential elements of Emergency Preparedness (outcome 1).

Learning Objectives:

After completion of this module faculty, staff, and administration will be able to:

- complete a ten-question quiz with 80% accuracy.
- identify at least 3 critical things they should know about the emergency action plan for their institution/campus
- identify where a copy of your institutions Emergency Action Plan resides.
- identify who their campus contact is.

Content to be covered:

- participate in annual training
 - who has to take it, what it is about, where can I take it at, when am I required to take it, and why do I have to take it, how do I take it.
- participate in annual drills and exercises
 - who, what, when, where, and why of the drills and exercises
- be familiar with the institutions Emergency Action Plan
 - where it is, what it says, who creates the plan, when is it updated, why do we have it.

Module 2: Safety Rules & Hazards

Outcomes:

After completion of this course, participants will recognize and respond to potential safety hazards found in the workplace (outcome 2).

After completion of this course, participants will be familiar with general safety rules (outcome 3).

Learning Objectives:

Given a list of 20 potential safety hazards faculty, staff, and administration will be able to choose five potential safety hazards they have seen on their campus.

After completion of this module faculty, staff, and administration will be able to complete a ten-question quiz with 80% accuracy.

Content to be covered:

- Exits are kept clear
- Exits are clearly marked
- Chemicals stored in appropriate places compliant
- First aid kits (where they are, who knows how to use it, etc.)
- Automated external defibrillator (AED) where they are, who knows how to use them, etc

Module 3: Evacuation Emergencies**Outcome 4:**

After completion of this course, participants will be familiar with **emergency procedures**.

Outcome 5:

After completion of this course, participants will be aware of potential **emergency situations** and the **responsibilities** and **actions** to be taken to ensure the general safety of self and others.

Learning Objective

After completion of this module faculty, staff, and administration will be able to identify the correct **evacuation** procedures and emergency escape **route** assignments for their institution.

Content to be covered:

- General evacuation responsibilities
- Where the evacuation maps are posted
- Who is authorized to order an evacuation
- Who is responsible for the head counts (procedures to follow)
- Location to meet
- Steps to follow during an evacuation

After completion of this module faculty, staff, and administration will be able to:

- order the steps in the process for **calling 911**.
- identify the correct procedures when there is a
- **bomb threat** on campus.
- **fire/explosion** in the building.
 - Pull fire alarm
 - Dial 911
 - Call internal emergency number
- **chemical spill** inside building.
- **natural gas odor or leak** on campus.

Module 4: Remain-in-Place Emergencies

Outcome 4:

After completion of this course, participants will be familiar with **emergency procedures**.

Outcome 5:

After completion of this course, participants will be aware of potential **emergency situations** and the **responsibilities** and **actions** to be taken to ensure the general safety of self and others.

Learning Objective

After completion of this module faculty, staff, and administration will be able to identify the correct **remain-in-place** procedures for their institution.

Content to be covered:

- General remain-in-place responsibilities
- Why procedures for remain-in-place emergencies are necessary
- Who is responsible for the head counts (procedures to follow)
- Who is responsible for notifying security of your location
- Steps to follow during remain-in-place emergencies

After completion of this module faculty, staff, and administration will be able to:

- identify the correct procedures for
 - **lockdowns**.
 - **severe weather**.
 - **armed intruder/active shooter** on campus.
 - **energy/utility outage**.
 - **terrorist attack**.
 - **chemical spill** near campus.
 - **personal injuries** (bleeding, unconscious, having a seizure, etc.)

Module 5: Personal Responsibility SCENARIOS - Evaluation

Outcome:

The learner will be aware of potential emergency situations and the responsibilities and actions to be taken to ensure the general safety of self and others (outcome 5).

Learning Objectives

Given an emergency situation scenario faculty, staff, and administration will be able to identify their responsibility in the situation and choose the correct action to take with 80 percent accuracy. Possible emergency situation scenarios include:

- Calling 911
- Fire/Explosion
 - Evacuate

- When to use a fire extinguisher
 - Who will meet/direct the fire department
- Chemical releases
- Personal injury
 - Who to call
 - Who will meet the ambulance
- Severe weather
 - Nearest shelter
- Civil unrest/Bomb threat
 - evacuate
- Energy/utility outages
- Workplace violence/Terrorism
 - lockdown procedures

Module 6: Emergency Resources – Links to outside resources

Appendix B – Resources Identified by Darrell McGraw

This section will contain a listing of the resources identified by Darrell McGraw for use in determining the content for the instruction. It will include a brief description of each resource, along with access information and URLs or other website tools or resources.

<http://www.ready.gov/>

Ready is a national public service advertising campaign designed to educate Americans to prepare for and respond to emergencies including natural and man-made disasters. The goal of is to increase the level of basic preparedness across the nation.

<https://www.osha.gov/Publications/OSHA3088.pdf>

An Occupational Safety & Health Administration (OSHA) publication on how to plan for workplace emergencies. Details how an employer can protect employees by preparing for an emergency and develop an emergency action plan.

<https://www.osha.gov/SLTC/emergencypreparedness/index.html>

The OSHA site provides information on how to prepare for emergencies. The pages provide information for employers and employees about responding to the emergency.

<https://www.osha.gov/SLTC/workplaceviolence/>

The OSHA site provides information on workplace violence, including assessing the risks of work environments and developing a prevention plan.

<https://www.fema.gov/national-incident-management-system/training>

The Federal Emergency Management Agency (FEMA) site for the *National Incident Management System (NIMS) Training Program*. This program provides training for emergency management officials and administrators responsible for developing training.

Appendix C-Schedule

Deliverable	Responsible Party	Proposed Due Date	Completed
Preliminary design document	Dr. Sutton		X
Review draft design document	Client (DARRELL MCGRAW)		X
Develop questions for subject matter experts	Dr. Sutton & the IT-578 Design Team		X
Revise and submit the final design document for DARRELL MCGRAW review (includes detailed development specifications & content)	The IT-578 Design Team with feedback from Dr. Sutton	2/8/15 (4 days)	
Review final design document w/corrections & comments	Client	2/11/15 (3 days)	
Review Client's corrections & comments of the Design Document	IT-578 Design Team & Dr. Sutton	2/13/15 (2 days)	
Develop and format content in early prototype form to correlate with instructional design specifications	IT-578 Design Team	3/2/15 (17 days)	
Test and review to finalize content	IT-578 Design Team, Dr. Sutton & Client SME	3/9/15 (7 days)	
Prototype training materials ready for client review & testing for "look and feel," functionality, content & usability	IT-578 Design Team & Dr. Sutton	3/15/15 (6 days)	
Client review of prototype materials	Client	3/20/15 (5 days)	
Usability testing of the training materials.	IT-578 Design Team, Dr. Sutton, & Client-identified test subjects	March 25, 2015 (5 days)	
Review results of usability testing and client feedback, and identify revisions to prototypes.	IT-578 Design Team & Dr. Sutton	4/1/15 (7 days)	
Revisions to prototype materials and finalization of development	IT-578 Design Team & Dr. Sutton	4/15/15 (13 days)	
Presentation of final version of training materials to Client	IT-578 class at DARRELL MCGRAW's office	April 15 or 22 nd , 2015	
Evaluative feedback concerning the training materials	Client	4/27/15 (6 or 12 days)	
Final IT-578 Class discusses client feedback on product	IT-578 class	April 29, 2015	

**Appendix D - Aligned Learning Outcomes, Instructional Strategies
and Assessment Chart**

Outcomes	Instructional Strategies	Assessment
a) familiar with the essential elements of Emergency Preparedness. (in module 1)	Presentation: Content for each learning module will be presented to the learner via learning management system.	Post-assessment quiz embedded in D2L requiring minimum of 80% mastery.
b) recognize and respond to potential safety hazards found in the workplace. (in module 2)	Demonstration: Real life situations will be addressed in the training that are applicable to the learner's work environment.	Identification of a minimum of five safety hazards found on learners' specific campuses.
c) familiar with general safety rules. (in module 2)	Problem-Based Learning: Quizzes will be used as assessment for application of knowledge.	Post-assessment quiz embedded in D2L requiring minimum of 80% mastery
d) familiar with Emergency Procedures. (in module 3)	Graphical Illustrations: Images and video will be used to reinforce content of the learning outcomes.	Post-assessment quiz embedded in D2L requiring minimum of 80% mastery
e) aware of potential emergency situations and the responsibilities and actions to be taken to ensure the general safety of self and others. (in module 4 & 5)	Audio: Voice-over narration will be used to support on-screen text.	Scenario-based post-assessment embedded in D2L requiring minimum of 80% mastery

Appendix E - Media Plan and Justification Chart

Outcomes & Strategies Statement	Supporting Media
Participants will be familiar with the essential elements of Emergency Preparedness	LMS - Desire2Learn Introduction Video - Final Cut Pro or iMovie Training Content - Camtasia, Powerpoint, open educational resources, and any additional resources needed.
Participants will recognize and respond to potential safety hazards found in the workplace and will be familiar with general safety rules.	LMS - Desire2Learn Training Content - Camtasia, Powerpoint, open educational resources, and any additional resources needed.
Participants will be familiar with Emergency Procedures.	LMS - Desire2Learn Training Content - Camtasia, Powerpoint, open educational resources, and any additional resources needed.
Participants will be aware of potential emergency situations and the responsibilities and actions to be taken to ensure the general safety of self and others	LMS - Desire2Learn Training Content - Camtasia, Powerpoint, open educational resources, and any additional resources needed.
Participants will be aware of potential emergency situations and the responsibilities and actions to be taken to ensure the general safety of self and others.	LMS - Desire2Learn Training Content - Camtasia, Powerpoint, open educational resources, and any additional resources needed.

Gant Chart Illustrating Design Schedule Dependencies

