

## Fire Protection

### Program Outcomes and Annual Assessment

Please complete a form for each of the programs within your department.

1. Program Information
  - a. Program: Fire Protection
  - b. Department: Disaster Science and Emergency Services
  - c. College: Health and Human Services
  - d. Program Assessment Coordinator: Dennis Ragins
  - e. Semester(s) data collected: Fall 2013, Spring 2014, Fall 2014, Spring 2015, Summer 2015, Fall 2015, Spring 2015, Spring 2016, Fall 2017, Spring 2018, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023
  - f. Report Submitted by: Dennis Ragins
  - g. E-mail – dragins@uakron.edu
  - h. Dates Submitted: Program goals: September 15, 2014, Program goal: September 21, 2015. June 27, 2018, June 30, 2020, June 30, 2021, June 6 2022, September 1 2023

### Program Mission and Goals

A degree in Fire Protection Technology opens the door to a wide range of career opportunities in municipal, industrial, state, federal and private fire protection agencies. Our program is the only fire protection program in the state of Ohio and is accredited by the International Fire Service Accreditation Congress. Our goals and objectives are met through a comprehensive curriculum which includes core courses recommended by FESHE (Fire and Emergency Services Higher Education).

1. Four main program objectives are to be assessed over a four year period.
  1. Students will be knowledgeable of basic terms, concepts, principles of Fire Protections.
  2. Demonstrate effective oral and written communication skills in fire safety for business and industry.
  3. Will be able to critically evaluate, analyze and manage emergency response incidents.
  - 4. Students must complete a 240-hour field experience and faculty guidance before graduating. (Fall 2013 & Spring 2014)**

**I. Fall 2013 and Spring 2014 results (first assessment period) focusing on objective 4:**

1. **Results.** What are the results of the planned assessments listed above? Describe below.

a. Present the summary data resulting from assessment activities

Data was collected for objective 4 over the Fall 2014 and Spring 2015 semesters. The internship course is offered multiple times a year.

- Fall 2013, Six students completed the 240 hour Field Experience course. The range of grades for the six students, two received a grade of an A, one received an A-, one received a C, and two received an F. Therefore 50% fall students successfully completed the Field Experience course. Approximately, 50% completed it with an A, Or A- indicating that the Fire Department supervisors ranked them as above average and also indicated that they would employ the students if it was their decision.
- Spring 2015, Eighteen students completed the Field Experience course. Seven of the students received an A, one received an A-, two received an B+, one received a B-, and two received an F. Eight (approximately 79%) received an A or A- in the course indicating that the Fire Department supervisors ranked them as above average, and also were noted that they would hire the students if it were their decision. Therefore of those students that completed their Field Experience, 85% (11) were successful.

b. Standards and expectations for performance:

The Field Experience has a detailed list of expectations and performance. General requirements are the completion of 240 hours under the mentorship of a Fire Protection Faculty member or Fire Department supervisor. Students must complete a report detailing their work experience, document their main tasks and hours, and also submit a supervisor evaluation form. The form provides a basis for a grade, and also qualitative comments about employability..

c. Meeting of standards:

Standards were met for all students in the Field Experience except for five out of the data set. Four received an F, and one received a C and they are not considered to be employable at this time.

Our goal is always to have 100% of all students involved in the Field Experience to be viewed as hireable after their work performance. Two cases out of a total of twenty three completed the Field Experience unsuccessfully. In short, approximately 80% success rate for the year is more than acceptable.

2. **Conclusions and Discoveries.** What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?

The Fire Protection Program is working to improve the employability and success of the students. This year, we have added during our initial meeting with the students several Fire Department officers will attend to explain the different experiences.

3. **Conclusions and Discoveries.** What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?

The Fire Protection Program is working to improve the employability and success of the students. This year, we have added during our initial meeting with the students several Fire Department officers will attend to explain the different experiences.

4. **Use of Results.** What changes in curriculum, instructional strategies, course content, facilities, equipment, resource allocation, etc. are recommended to address the gaps between expected performance and actual results? How will they be implemented? If none, describe why changes were not needed.

See above.

5. **Dissemination of Results, Conclusions and Discoveries.** How and with whom were the results shared? Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.

The Fire Protection faculty consists of one full time Associate professor and one Visiting professor. The information obtained for this analysis was shared with the other faculty member, as future planning and curriculum is currently taking place. The faculty met at the beginning of the assessment process as a program to discuss the assessment objectives to be reviewed. The faculty is in the process of curriculum revision, and therefore already looking at ways to strengthen employability. This data will play into that piece.

6. **Describe your assessment plans for AY2014-15.**

In writing the objectives, the faculty predetermined that these would be measurable by evaluations, specific test questions, rubrics, or other measures in which the data is fairly easy to keep and maintain. AY2014-2015 data will include analyzing data related to the

student's abilities to write successful senior research papers, as the faculty work toward strengthening those skills through more focused curriculum choices.

## **II. Fall 2014 and Spring 2015 results (second assessment period) focusing on objective 4:**

1. **Results.** What are the results of the planned assessments listed above? Describe below.

a. Present the summary data resulting from assessment activities

Data was collected for objective 4 over the Fall 2014 and Spring 2015 semesters. The internship course is offered multiple times a year.

- Fall 2014, Ten students completed the 240 hour Field Experience course. The range of grades for the ten students, three received a grade of an A, three received an A-, two received B+, and two received an F. Therefore 80% fall students successfully completed the Field Experience course. Approximately, 60% completed it with an A, indicating that the Fire Department supervisors ranked them as above average and also indicated that they would hire the students if it was their decision.
- Spring 2015, Thirteen students completed the Field Experience course. Six of the students received an A, four received an A-, one received an B+, one received a B, and one received a B-. Ten students (approximately 79%) received an A in the course indicating that the Fire Department supervisors ranked them as above average, and also were noted that they would hire the students if it were their decision. Therefore of those students that completed their Field Experience, 100% were successful.

b. Standards and expectations for performance:

The Field Experience has a detailed list of expectations and performance. General requirements are the completion of 240 hours under the mentorship of a Fire Protection Faculty member or Fire Department supervisor. Students must complete a report detailing their work experience, document their main tasks and hours, and also submit a supervisor evaluation form. The form provides a basis for a grade, and also qualitative comments about employability..

c. Meeting of standards:

Standards were met for all students in the Field Experience except for two out of the data set. They both received a F, and are not considered to be employable at this time..

Our goal is always to have 100% of all students involved in the Field Experience to be viewed as hireable after their work performance. Two cases out of a total of twenty three completed the Field Experience unsuccessfully. In short, a 91.3% success rate for the year is more than acceptable.

2. **Conclusions and Discoveries.** What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?

The Fire Protection Program is working to improve the employability and success of its students. This year, we have added during our initial meeting with the students several Fire Department officers will attend to explain the different experiences .

3. **Use of Results.** What changes in curriculum, instructional strategies, course content, facilities, equipment, resource allocation, etc. are recommended to address the gaps between expected performance and actual results? How will they be implemented? If none, describe why changes were not needed.

See above.

4. **Dissemination of Results, Conclusions and Discoveries.** How and with whom were the results shared? Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.

The Fire Protection faculty consists of one full time Associate professor and one Visiting professor. The information obtained for this analysis was shared with the other faculty member, as future planning and curriculum is currently taking place. The faculty met at the beginning of the assessment process as a program to discuss the assessment objectives to be reviewed. The faculty is in the process of curriculum revision, and therefore already looking at ways to strengthen employability. This data will play into that piece.

5. **Describe your assessment plans for AY2015-16.**

In writing the objectives, the faculty predetermined that these would be measurable by evaluations, specific test questions, rubrics, or other measures in which the data is fairly easy to keep and maintain. AY2015-2016 data will include analyzing data related to the student's abilities to write successful senior research papers, as the faculty work toward strengthening those skills through more focused curriculum choices.

### **III. Fall 2015 and Spring 2016 Assessment results focusing on Program Objective 4, the Field Experience is offered multiple times during the academic year.**

1. Results. What are the results of the planned assessments listed above? Describe below.
  - a. Present the summary data resulting from assessment activities

- Fall 2015, Six students completed the 240 hour Field Experience course. The range of grades for the Six students, two received a grade of an A, four received an A-. Therefore 100% fall students successfully completed the Field Experience course. With 100% completed The Field Experience with an A- or an A, this indicates that the Fire Department supervisors ranked them as above average and also that they would employ the students if it was their decision.
- Spring 2016, Nine students completed the Field Experience course. Two of the students received an A, four received an A-, two received an B+, and one received a B-. Six students (approximately 67%) received an A in the course indicating that the Fire Department supervisors ranked them as above average, and also were noted that they would employ the students if it were their decision. Therefore of those students that completed their Field Experience, 100% were successful.

**b. Standards and expectations for performance:**

The Field Experience has a detailed list of expectations and performance. General requirements are the completion of 240 hours under the mentorship of a Fire Protection Faculty member or Fire Department supervisor. Students must complete a report detailing their work experience, document their main tasks and hours, and also submit a supervisor evaluation form. The form provides a basis for a grade, and also qualitative comments about employability..

**c. Meeting of standards:**

Standards were met at both a junior level course and senior level course.

What gaps were found between the standards for student learning and the actual results?

Our goal is that 100% of all students successfully complete our Field Experience with a B or higher. Instructors emphasize the importance of professionalism and punctuality in every Fire Protection course the student takes before beginning the Field Experience.

2. **Conclusions and Discoveries.** What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?

The Fire Protection Program is working to improve the employability and success of the students. This year, we have split the Field Experience hours, 120 actual Field Experience and 120 hours of Fire Research in an effort to enhance the total experience.

3. **Use of Results.** What changes in curriculum, instructional strategies, course content, facilities, equipment, resource allocation, etc. are recommended to address the gaps between expected

performance and actual results? How will they be implemented? If none, describe why changes were not needed.

While the Fire Protection Program is meeting its standard measurements, several changes have been made to strengthen this program goal. The Fire Protection's curriculum was changed to reflect a change in our student population. We now offer 2230:295- Field Experience I 2 credit hours, and 2230:296 – Field Experience II 2 credit hours. For career firefighters they only have to take the Field Experience II because it offers the student the supervisory or management experience.

4. **Dissemination of Results, Conclusions and Discoveries.** How and with whom were the results shared? Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.

The Fire Protection faculty consists of one full time Associate professor and one Visiting professor. The information obtained for this analysis was shared with the other faculty member, as future planning and curriculum is currently taking place. The faculty met at the beginning of the assessment process as a program to discuss the assessment objectives to be reviewed. The faculty is in the process of curriculum revision, and therefore already looking at ways to strengthen employability. This data will play into that piece.

6. **Describe your assessment plans for AY2016-17.** In writing the objectives, the faculty predetermined that these would be measurable by evaluations, specific test questions, rubrics, or other measures in which the data is fairly easy to keep and maintain. AY2016-2017 data will include analyzing data related to the student's abilities to communicate to the class in formal presentations.

#### **IV. Fall 2019 and Spring 2020 Assessment results focusing on Program Objective 4,**

1. **Results. What are the results of the planned assessments listed above? Describe below.**

- a. **Present the summary data resulting from assessment activities**

- **Fall 2019 and Spring 2020 we totaled Fifteen students who completed the Field Experience 1 and 2 course. Eight of the students received an A, four received an A-, and three received an B+. Eight students (approximately 80%) received an A in the course indicating that the Fire Department supervisors ranked them as above average, and also were noted that they would employ the students if it were their decision. Therefore of those students that completed their Field Experience, 100% were successful.**

**b. Standards and expectations for performance:**

The Field Experience 1 and 2 has a detailed list of expectations and performance. General requirements are the completion of 120 hours under the mentorship of a Fire Protection Faculty member or Fire Department supervisor. Students must complete a report detailing their work experience, document their main tasks and hours, and also submit a supervisor evaluation form. The form provides a basis for a grade, and also qualitative comments about employability..

**c. Meeting of standards:**

Standards were met at both a junior level course and senior level course.

What gaps were found between the standards for student learning and the actual results?

none

Our goal is that 100% of all students successfully complete our Field Experience with a B or higher. Instructors emphasize the importance of professionalism and punctuality in every Fire Protection course the student takes before beginning the Field Experience.

**2. Conclusions and Discoveries. What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?**

The Fire Protection Program is working to improve the employability and success of the students. This year, we have split the Field Experience hours, 120 actual Field Experience and 120 hours of Fire Research in an effort to enhance the total experience.

**3. Use of Results. What changes in curriculum, instructional strategies, course content, facilities, equipment, resource allocation, etc. are recommended to address the gaps between expected performance and actual results? How will they be implemented? If none, describe why changes were not needed.**

While the Fire Protection Program is meeting its standard measurements, several changes have been made to strengthen this program goal. The Fire Protection's curriculum was change to reflect a change in our student population. WE now offer 2230:295- Field Experience I 2 credit hours, and

**2230:296 – Field Experience II 2credit hours. For career firefighters they only have to take the Field Experience II because it offers the student the supervisory or management experience.**

**4. Dissemination of Results, Conclusions and Discoveries. How and with whom were the results shared? Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.**

**The Fire Protection faculty consists of two full time Associate professors. The information obtained for this analysis was shared with the other faculty member, as future planning and curriculum is currently taking place. The faculty met at the beginning of the assessment process as a program to discuss the assessment objectives to be reviewed. The faculty is in the process of curriculum revision, and therefore already looking at ways to strengthen employability. This data will play into that piece.**

**6. Describe your assessment plans for AY2020-21. In writing the objectives, the faculty predetermined that these would be measurable by evaluations, specific test questions, rubrics, or other measures in which the data is fairly easy to keep and maintain. AY2020-2021 data will include analyzing data related to the student’s abilities to communicate to the class in formal presentations.**

**IV. Fall 2020 and Spring 2021 Assessment results focusing on Program Objective 4,**

**1. Results. What are the results of the planned assessments listed above? Describe below.**

**a. Present the summary data resulting from assessment activities**

**• Fall 2020 and Spring 2021 we totaled Fifteen students who completed the Field Experience 1 and 2 course. 13 of the students received an A, and one received an B. There was also one student that was given an Incomplete. Thirteen students (approximately 87%) received an A in the course indicating that the Fire Department supervisors ranked them as above average, and also were noted that they would employ the students if it were their decision. Therefore of those students that completed their Field Experience, 100% were successful.**

**b. Standards and expectations for performance:**

The Field Experience 1 and 2 has a detailed list of expectations and performance. General requirements are the completion of 120 hours under the mentorship of a Fire Protection Faculty member or Fire Department supervisor. Students must complete a report detailing their work experience, document their main tasks and hours, and also submit a supervisor evaluation form. The form provides a basis for a grade, and also qualitative comments about employability..

**c. Meeting of standards:**

Standards were met at both a junior level course and senior level course.

What gaps were found between the standards for student learning and the actual results?

none

Our goal is that 100% of all students successfully complete our Field Experience with a B or higher. Instructors emphasize the importance of professionalism and punctuality in every Fire Protection course the student takes before beginning the Field Experience.

**2. Conclusions and Discoveries. What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?**

The Fire Protection Program is working to improve the employability and success of the students. This year, we have split the Field Experience hours, 120 actual Field Experience and 120 hours of Fire Research in an effort to enhance the total experience.

**3. Use of Results. What changes in curriculum, instructional strategies, course content, facilities, equipment, resource allocation, etc. are recommended to address the gaps between expected performance and actual results? How will they be implemented? If none, describe why changes were not needed.**

While the Fire Protection Program is meeting its standard measurements, several changes have been made to strengthen this program goal. The Fire Protection's curriculum was change to reflect a change in our student population. WE now offer 2230:295- Field Experience I 2 credit hours, and 2230:296 – Field Experience II 2credit hours. For career firefighters they only have to take the Field Experience II because it offers the student the supervisory or management experience.

**4. Dissemination of Results, Conclusions and Discoveries. How and with whom were the results shared? Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.**

The Fire Protection faculty consists of two full time Associate professors. The information obtained for this analysis was shared with the other faculty member, as future planning and curriculum is currently taking place. The faculty met at the beginning of the assessment process as a program to discuss the assessment objectives to be reviewed. The faculty is in the process of curriculum revision, and therefore already looking at ways to strengthen employability. This data will play into that piece.

**6. Describe your assessment plans for AY2021-22. In writing the objectives, the faculty predetermined that these would be measurable by evaluations, specific test questions, rubrics, or other measures in which the data is fairly easy to keep and maintain. AY2021-2022 data will include analyzing data related to the student's abilities to communicate to the class in formal presentations.**

**IV. Fall 2020 and Spring 2021 Assessment results focusing on Program Objective 4,**

**1. Results. What are the results of the planned assessments listed above? Describe below.**

**a. Present the summary data resulting from assessment activities**

- **Fall 2020 and Spring 2021 we totaled nine students who completed the Field Experience 1 and 2 course. All nine of the students received an A. All nine students (100%) received an A in the course indicating that the Fire Department supervisors ranked them as above average, and also were noted that they would employ the students if it were their decision. Therefore of those students that completed their Field Experience, 100% were successful.**

**b. Standards and expectations for performance:**

The Field Experience 1 and 2 has a detailed list of expectations and performance. General requirements are the completion of 120 hours under the mentorship of a Fire Protection Faculty member or Fire Department supervisor. Students must complete a report detailing their work experience, document their main tasks and hours, and also submit a supervisor evaluation form. The form provides a basis for a grade, and also qualitative comments about employability..

**c. Meeting of standards:**

**Standards were met at both a junior level course and senior level course.**

**What gaps were found between the standards for student learning and the actual results?**

**none**

**Our goal is that 100% of all students successfully complete our Field Experience with a B or higher. Instructors emphasize the importance of professionalism and punctuality in every Fire Protection course the student takes before beginning the Field Experience.**

**2. Conclusions and Discoveries. What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?**

**The Fire Protection Program is working to improve the employability and success of the students. This year, we have split the Field Experience hours, 120 actual Field Experience and 120 hours of Fire Research in an effort to enhance the total experience.**

**3. Use of Results. What changes in curriculum, instructional strategies, course content, facilities, equipment, resource allocation, etc. are recommended to address the gaps between expected performance and actual results? How will they be implemented? If none, describe why changes were not needed.**

**While the Fire Protection Program is meeting its standard measurements, several changes have been made to strengthen this program goal. The Fire Protection's curriculum was change to reflect a change in our student population. WE now offer 2230:295- Field Experience I 2 credit hours, and 2230:296 – Field Experience II 2credit hours. For career firefighters they only have to take the Field Experience II because it offers the student the supervisory or management experience.**

**4. Dissemination of Results, Conclusions and Discoveries. How and with whom were the results shared? Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.**

**The Fire Protection faculty consists of two full time Associate professors. The information obtained for this analysis was shared with the other faculty member, as future planning and curriculum is currently taking place. The faculty met at the beginning of the assessment process as a program to discuss the assessment objectives to be reviewed. The faculty is in the process of**

curriculum revision, and therefore already looking at ways to strengthen employability. This data will play into that piece.

6. Describe your assessment plans for AY2021-22. In writing the objectives, the faculty predetermined that these would be measurable by evaluations, specific test questions, rubrics, or other measures in which the data is fairly easy to keep and maintain. AY2021-2022 data will include analyzing data related to the student's abilities to communicate to the class in formal presentations.

#### IV. Fall 2019 and Spring 2020 Assessment results focusing on Program Objective 4,

1. Results. What are the results of the planned assessments listed above? Describe below.

a. Present the summary data resulting from assessment activities

- Fall 2019 and Spring 2020 we totaled Fifteen students who completed the Field Experience 1 and 2 course. Eight of the students received an A, four received an A-, and three received an B+. Eight students (approximately 80%) received an A in the course indicating that the Fire Department supervisors ranked them as above average, and also were noted that they would employ the students if it were their decision. Therefore of those students that completed their Field Experience, 100% were successful.

b. Standards and expectations for performance:

The Field Experience 1 and 2 has a detailed list of expectations and performance. General requirements are the completion of 120 hours under the mentorship of a Fire Protection Faculty member or Fire Department supervisor. Students must complete a report detailing their work experience, document their main tasks and hours, and also submit a supervisor evaluation form. The form provides a basis for a grade, and also qualitative comments about employability..

c. Meeting of standards:

Standards were met at both a junior level course and senior level course.

What gaps were found between the standards for student learning and the actual results?

none

**Our goal is that 100% of all students successfully complete our Field Experience with a B or higher. Instructors emphasize the importance of professionalism and punctuality in every Fire Protection course the student takes before beginning the Field Experience.**

**2. Conclusions and Discoveries. What conclusions or discoveries were made from these results? Describe below. Have questions been raised about the effectiveness of the assessment plan? If so, what changes are needed? Are different outcomes, measures, analysis, etc. needed?**

**The Fire Protection Program is working to improve the employability and success of the students. This year, we have split the Field Experience hours, 120 actual Field Experience and 120 hours of Fire Research in an effort to enhance the total experience.**

**3. Use of Results. What changes in curriculum, instructional strategies, course content, facilities, equipment, resource allocation, etc. are recommended to address the gaps between expected performance and actual results? How will they be implemented? If none, describe why changes were not needed.**

**While the Fire Protection Program is meeting its standard measurements, several changes have been made to strengthen this program goal. The Fire Protection's curriculum was changed to reflect a change in our student population. WE now offer 2230:295- Field Experience I 2 credit hours, and 2230:296 – Field Experience II 2 credit hours. For career firefighters they only have to take the Field Experience II because it offers the student the supervisory or management experience.**

**4. Dissemination of Results, Conclusions and Discoveries. How and with whom were the results shared? Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.**

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**6. Describe your assessment plans for AY2020-21. In writing the objectives, the faculty predetermined that these would be measurable by evaluations, specific test questions, rubrics, or other measures in which the data is fairly easy to keep and maintain. AY2020-2021 data will**

include analyzing data related to the student's abilities to communicate to the class in formal presentations.

**IV. Fall 2022 and Spring 2023 Assessment results focusing on Program Objective 4,**

**1. Results. What are the results of the planned assessments listed above? Describe below.**

**a. Present the summary data resulting from assessment activities**

- **Fall 2022 and Spring 2023 we totaled 0 students who completed the Field Experience 1 and 2 course. .**