

Lassen Community College
Fire Technology
Instructional Program Review

May 2013

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Fire Technology Instructional Program Review

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SECTION ONE: ACADEMIC PLANNING

I. PROGRAM OVERVIEW, OBJECTIVES, AND STUDENT LEARNING OUTCOMES

Description:

Purpose and Specific Objectives of the Program

The Fire Technology Program is designed to prepare students for employment in the Fire Science industry. The Associate in Fire Technology degree and Certificate of Achievement in Fire Technology provide students and employers with certifiable standards of technical career proficiency. The curriculum provides for training skills and techniques as follows:

- a. Working knowledge and understanding of fire positions. **i.e.** firefighter, fire inspector, fire investigator, supervisors and managers.
- b. Workplace safety and orientation
- c. “Work ethic” attitudes, principles, responsibility, discipline and initiative.
- d. Technical language, vocabulary, equipment, materials and modes of operation.
- e. Broad background in the mental and physical skills necessary to operate in the world of fighting fires.

Transfer:

Our program is currently transferable to state colleges and Universities with four-year degrees in Fire Science, such as Cal State Sacramento and UNR.

Occupation:

Successful students will find employment opportunities in the Fire Science industry in local areas with agencies such as United States Forest Service, California Department of Forestry-and Fire Protection, United States Department of Interior; Bureau of Land Management and many local fire departments. Many of these same opportunities are available nationwide.

All students completing the required courses necessary to obtain an Associate in Science degree or Certificate of Achievement in Fire Technology will have received the education to be competent at working as a member of a team or as an individual in the firefighting world. The student will be able to demonstrate a general knowledge of the safest use and operation of equipment and techniques. In addition, these students will also have a working knowledge of the incident command system and its function.

Description of the Program (Catalog Description):

The Associate in Science and Certificate of Achievement – Fire Technology are designed to provide students with updated skills and knowledge necessary to successfully compete for fire service positions. The curriculum serves as an in-service program as well as pre-employment program for students seeking employment or advancement in the profession of urban fire fighting and wildland fire suppression. Opportunities to study emergency response fields such as: medical, hazardous materials and rescue are included.

As a fire technology major, you will:

- Study a broad overview of fire technology including: fire behavior, fire prevention, fire protection equipment and systems

The Fire program for the last 2 years has provided the college with over a million dollar of positive cash flow (see chart below)

	Credit FTES 2011/12	Credit FTES 2010/11	Credit FTES 2009/10	Credit FTES 2008/09	Credit FTES 2007/08	Credit FTES 2006/07	Credit FTES 2005/06	Credit FTES 2004/05
Fire Technology	199.89	189.90	128.8	72.1	24.3	5.42	4.17	1.98
State Apportionment per FTE	\$4,565.00	\$4,565.00	\$4,565.00	\$4,565.00	\$4,565.00	\$4,367.00	\$4,123.00	\$3,891.02
Total Program Revenue	\$923,295.40	\$901,651.76	\$588,885.00	\$328,680.00	\$123,711.50	\$24,412.84	\$18,406.87	\$7,704.22
Total Program Expenditure	\$373,525.03	\$352,745.26	\$175,169.00	\$87,373.00	\$75,439.95	\$40,661.00	\$12,996.42	\$9,904.04
Excess Revenue	\$549,768.44	\$548,906.50	\$413,716.00	\$241,307.00	\$48,271.55	-\$16,248.16	\$5,410.45	-\$2,199.82

Evaluation

In 1996, Lassen Community College attempted to develop a Fire Technology program. For a variety of reasons, the program was never presented to the Chancellor’s Office for approval. Over the next few years active community support was documented through surveys, advisory board meetings, and input from both public and private agencies. The new fire technology program provides for improvement in the following areas: goal oriented focus on providing training that enables the student to be more readily employable at entry levels, adjustments of courses that enable a student to complete the training and general education requirements, creation of courses that provide a basic and solid foundation in Fire Science studies.

The future of the Fire program at Lassen College will depend on being able to provide qualified instructors. There seems to be more than a sufficient amount of interest by local students and local agencies with employment and training needs to provide the program with modest growth for many years to come. The additional longer-term expansion of the program facilities could provide a means to increase enrollment simply by having a larger student capacity, as well as offering the ability to introduce new programs. The extent of the marketability of the program is unknown, although every effort of recruiting to date has yielded interest. The growth of the Fire Technology Program at Lassen College will be determined in a large part by the availability of a training center. Having this full-service Training Center will allow us to provide unique training opportunities that are not available from other community colleges in Northern California. Some of these programs could be developed for or by Homeland Security, FEMA, and the California Corrections Center.

As a new program it is hard to do an accurate evaluation of our budget because as we grow there are so many variables that change. It is obvious that we are growing and are producing revenue. It is also obvious that we have potential to grow at a very fast rate and are able to produce many more FTES than we are currently producing. As it is shown that we have the potential to increase our program in many ways over the next few years we believe that our growth will only be limited by the amount of financial support that the college has to give. We do believe we will bring in much more income to the college than we will spend, but we will need to find ways to develop a Public Safety Training Center.

Planning Agenda:

1. Increase operating budget for Fire Technology program including, Staffing, Supplies, Travel, and Staff development
2. Pursue government grants to fund the construction of a Fire Science Training Center.

II STUDENT OUTCOMES

A. Trends and Patterns in Student Outcomes

Description

Since the Fire program is only 6 years old we have only had 14 graduates; we are showing an increase each year. We have been able to place over 40 of our students into jobs working for local fire agencies. The reports that we received back from these agencies have been that the students were very well prepared for their new jobs and that they were very happy with their performances.

**Fire Technology Program
Retention/Success Comparison Fall 2006- Spring 2012**

Year	Enrollment	Retention	Success
2006/2007	79	99%	96%
2007/2008	266	88%	91%
2008/2009	1,173	99%	97%
2009/2010	1,447	97%	93%
2010/2011	2,579	93%	87%
2011/2012	2,678	93%	81%

Evaluation

Job placement data is only available when students receive assistance in acquiring a job from a fire program member, or when the student informs a program member of their employment status after leaving the program. We have created our own tracking system for the program but it relies on the students providing us with their success. Therefore this data potentially represents only a portion of the overall statistics, and for that reason no further evaluation is offered. As indicated by the table above retention and success in fire science courses has been consistently high.

Recommendations/ Plan

Work with the Office of Institutional Research to develop sufficient tracking mechanisms to provide sufficient data for evaluation.

B. Student Learning Outcome Assessment

As a result of our assessments we have found that the students and instructors are confident that our methods of instruction are currently performing the way we expect them to and students are leaving with the skills necessary for success in the workplace.

Recommendations/Plan

Submit SLO assessment results to the Office of Instruction within the necessary timeline established by the Office of Instruction.

C Student Evaluation Summary

Description

The overall response to the Student evaluation shows a positive attitude towards the program. The responses offered by the students suggest that they like the quality and experience of our instructors. Most of the students liked the Fire Technology Program but hoped that we would be offering more classes in the future and that we needed a modern training facility. The summary of the Student Evaluation provided by Academic Services is attached. (Appendix D)

Evaluation

The Student Evaluation summary shows that the students in the Fire Technology Program are generally satisfied with the scheduling of courses. The data does reflect that most students felt we needed more modern training facilities to go with the up to date training we provided. The results show the students like the new technology like the new smart board we had in our old facility.

Planning Agenda:

We need to continue work on building a new Public Safety Training center. Since we have moved to our current facility we will need to install smart boards for 2 rooms and an overhead projector for the 3rd room. The classroom furniture in 2 of the rooms is very antiquated and desperately needs to be up *graded*. *Since we now have Fire Technology, Post, EMS and Nursing in the same facility we need to upgrade to a color printer for the facility.*¹

III. CURRICULUM

A. Degrees and/or Certificates

Description

The program offers an Associate in Science degree in Fire Technology and a Certificate of Achievement in Fire Technology. We have recently offered a Certificate of Accomplishment in Wildland Organized Crew Academy. (Appendix A)

Evaluation

Evaluations of the core courses in the degrees and certificates performed by the advisory committee and members of local fire agencies has resulted in the affirmation that the courses currently offered satisfy the current employer and industry skill requirements of the Fire Science field. The curriculum of our core courses has been evaluated by national fire agencies and the National Fire Protection Agency (NFPA). They currently meet the National standards. We will continue to update our fire curriculum to meet the needs of the industry and at the request of the advisory committee.

With advice from the advisory committee we would like to introduce two more degree programs (Homeland Security and an EMS Emergency Medical Services) and two new certifications (Fire Prevention, Fire Investigation). We have developed a Certificate of Accomplishment in Wildland Organized Crew Academy. We have successfully negotiated with the United States Forest Service to complete a contract to offer many of their trainings through the college. As additional degrees and certificates are developed, expansion of staff will be necessary. We will be required to provide at least a half time instructor to help with the new degrees and certificates. We were scheduled to hire a full time instructor in 2011 but due to current financial strains it is not appropriate at this time.

Recommendations/Plan

1. Continue to add courses as needed and create new degrees and certificates.
2. Pursue facilities, equipment and staffing as expansion develops.
3. Develop and fund an Advertising/Recruiting plan with input from the Advisory Committee.

B Courses

Description

Since the Fire Technology program was started in 2007, many classes have been added or deleted from the program. The Curriculum/Academic Standards committees have approved all changes. As this is the third instructional program review, all active Fire Science courses have been reviewed for currency and have been submitted to the Curriculum Committee. We are required to review our classes yearly as there are many changes to state and federal classes each year.

Evaluation

As a result of course review,

- Degree applicable courses meet the core requirements for the A.S. Degrees, Certificates of Achievement, and elective requirements for the A.S. Degrees.
- Certain stand-alone courses meet the requirements for vocational training.
- Student Learning Outcome have been prepared for each course and approved by the Curriculum Committee.

An *Existing Course Form* was completed for each course and submitted to the Curriculum Committee.

Planning Agenda

C. Scheduling and Enrollment Patterns

Description

The Fire Technology program for both the AS degree and the certification is currently being offered in a two-year cycle. The classes are offered starting in mid-October and run until mid-April. There are currently very few classes offered during the summer months. The late start early out program has seemed to work very well for students who are trying to work for local fire agencies. The specifics of the two-year scheduling plan are found in Appendix B.

As indicated by the FTE chart below, enrollments have been increasing particularly over the last two years.

**Fire Technology Program
FTE Comparison Fall 2004- Spring 2010**

TOP Code	Title	Credit FTES 2011/2012	Credit FTES 2010/2011	Credit FTES 2009/2010	Credit FTES 2008/2009	Credit FTES 2007/2008	Credit FTES 2006/07	Credit FTES 2005/06	Credit FTES 2004/05
2133	Fire Technology	199.89	189.90	128.8	72.1	24.3	5.42	4.17	1.98
	<i>Total Normalized FTES</i>	199.89	189.90	128.8	72.1	24.3	5.42	4.17	1.98

Evaluation

Enrollment patterns show the fire technology program has grown significantly during the last two years. Enrollments are expected to stabilize over the next couple of years.

Recommendations/Plan

None

D. Articulation/Integration of Curriculum

Description/ Evaluation:

Our program is currently transferable to state colleges and Universities with four-year degrees in Fire Science, such as Cal State Sacramento and UNR.

Planning Agenda

None

E. Equipment

Description/ Evaluation:

1. List capital outlay equipment, age of equipment and replacement schedule
2. Identify any existing equipment maintenance/service agreements
3. Evaluate the condition of capital outlay equipment in light of the replacement schedule and available funds.
4. Evaluate the effectiveness of and need for additional maintenance/service agreements.
5. Justify any proposed modification or additions to equipment available for students and/or faculty/instructional assistants within the program.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning, Student Services Planning, Facilities Planning, Technology Planning Forms as appropriate for any recommendations requiring institutional action.

Prioritized Recommendations for Implementation by Program Staff

Due date: Program (i.e. 2012 Administration of Justice Instructional Program Review)
 Prioritized Recommendations Requiring Institutional Action for Inclusion in Educational Master Plan

IV: OUTSIDE COMPLIANCE ISSUES (if appropriate for program)

Description:

If appropriate, describe the role of outside compliance issues on the Special Program.

Evaluation:

Assess changes in compliance or identification of compliance-related needs and the impact on the Special Program.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning, Facilities Planning, Technology Planning and Human Resource Planning Forms as appropriate for any recommendations requiring institutional action.

V. Prioritized Recommendations for Implementation by Program Staff

Due date: Program (i.e. 2013 Basic Skills Program Review)
 Prioritized Recommendations Requiring Institutional Action for Inclusion in Education Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
2, 4	30 Fire Shelters	Immediate	\$10500	Support student job training, job placement opportunities, and safety
2, 4	40 one person tents	Immediate	6440	"
2, 4	20 Red Bags	Immediate	1220	"
2, 4	40 Nomex pants	Immediate	5280	"
2, 4	40 Nomex shirts	Immediate	5000	"
2, 4	15 Initial attack packs	Immediate	2250	"
2, 4	1 Roll chainsaw chain	Immediate	200	"
2, 4	2 Trauma Kits	Immediate	500 ea	
2, 4	4 hand held radios	immediate	3000	
2, 4	1 Unit Misc. Lumber	Immediate	1500	"
2, 4	2 Chainsaws	Immediate	1000	"
2, 4	20 Misc. Handtools	Immediate	1000	"
2, 4	10 GPS Units	Immediate	1500	"
2, 4	10 Kestrel Weather Units	Immediate	1660	"
2, 4	2 Fire Buggies	Immediate	12000	"
2, 4	2 Trauma Kits	Immediate	500 ea	

SECTION TWO: HUMAN RESOURCE PLANNING

A. Program Staffing

Description

The level of staffing for the 2013/2014 academic year is as follows:

Full time Director position	Part Time Faculty	Classified Employees Instructional Site Administrative Coordinator 100%
David Trussell	Dave Ramirez	Jennifer Bird
	Chad Lawson	
	Dan Weaver	
	Mike Rivas	
	Allen Schultz	
	David Wade	
	Mike Klimek	
	Dana Higgins	
	Ted Friedline	
	Lois Charlton	
	Jennifer McNally	
	Steve Hawks	

Evaluation

With the Fire program in its very early stages we have been able to offer most of the classes in our program. But we have not been able to offer some of our classes because we could not find a qualified instructor. Living in a remote area is a handicap for acquiring qualified instructors. Since the number of FTES the fire program creates has gone from less than 2 to almost 200 per year, having a Full time instructor would help with our shortage of part time instructors. This instructor would have to be able to meet all State Fire Marshall and NWCG instructor qualification. There is a need for an administrative assistant and a tool manager. These positions could be combined into one position

Finding part time instructors to teach at Lassen College has turned out to be the biggest obstacle for our program. Being in a remote area we do not have a large amount of local agencies to draw potential instructors from. We have had to cancel a few of our elective classes because we did not have a qualified instructor. Not only do our instructors have to meet Lassen College requirements but also State Fire Marshal and/or National Wildfire Coordinating Group requirements. We feel that the best way to help with this problem would be to offer a full time instructor position. We were scheduled to fill a full-time instructor in 2011 but due to budget constraints, we have not yet filled this position. With the expansion of the program's course offerings and continuing acquisition of large amounts of equipment, it has become apparent that with that we will need a part time Administrative Assistant and a part time Equipment Manager.

Recommendations/Plan

- Employ full -time Fire Technology Instructor
- Employ part-time equipment manager position
- Employ Administrative Assistant position

B. Professional Development

Description

Three of the part time faculty members were able to attend state fire marshal required training and two were able to attend another offered by state fire training. We have not had the funds to attend as many of the trainings as are needed but as the program develops we hope to attend more.

Evaluation

The part time fire Program faculty members have shown a desire to seek any and all training that would be available to them. One of the part time faculty as made an offer to college to pursue becoming a master instructor for State Fire Training if the College will help with the financial costs.

Recommendations/Plan

Identify and attend additional professional development activities as they become available and are needed, provided there are available funds.

C. Student Outcomes

Description/ Evaluation:

None recommended human resource improvements

D. Prioritized Recommendations for Implementation by Program Staff

Identify and attend additional professional development activities as they become available and are needed, provided there are available funds.

2013 Fire Technology Instructional Program Review

Prioritized Recommendations Requiring Institutional Action for Inclusion in Human Resource Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
3	Full-Time Instructor	Immediate	90,000	Increase course and section availability
4	Administrative Assistant	Immediate	60,000	Increase support of program and enhance student success

SECTION THREE: FACILITIES PLANNING

Description

We currently use HU-103 and H-104 as our office and we are using HU-206 for most of our classes. We also use the Ted Overton training facility at the BLM training center. We have been looking into what it would take to convert the old Co-Gen plant into a Fire Training Center. There is a great potential there but it is cost prohibitive. We have cleaned a small part of it and are using it for storage of our fire engine. We are also using one of the old modular buildings on the east end of the campus as a storage facility. We have been using a room at the old Credence high school for our first responder classes. We would like to be able to acquire the whole building to use as a Public Safety Training Center. That facility would incorporate Fire, POST, EMS and Nursing.

Evaluation

Evaluation of the facilities available to the Fire Technology Department has yielded several truths:

- The current facility is limited in space for live scenarios and fire training
- The current facility is limited in space for student activity and storage of student materials
- Availability of classroom space has become limited due to the fact that we have grown from less than 2 FTES to a high of 200 FTES per year and are expecting even more growth.

Planning Agenda:

Acquire a full service, and modern Fire Technology Training Center.

Prioritized Recommendations for Implementation by Program Staff

None

2013 Fire Technology Instructional Program Review

Prioritized Recommendations Requiring Institutional Action for Inclusion in Facilities Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
3, 4	Additional class Space	Immediate	0	Provide space for additional sections and generate additional FTES
3, 4	Acquire Public Safety Training Facility (i.e. Credence High School Complex)	Immediate	Unknown	Provide all inclusive space for Fire technology program including storage, offices, classroom, outdoor training

SECTION FOUR: TECHNOLOGY PLANNING

Description/ Evaluation:

1. Describe and evaluate technology and technology support provided for instruction and instructional support.
2. Describe any technology and technology support needs identified by assessment of student learning outcomes.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning, Facilities Planning, Technology Planning and Human Resource Planning Forms as appropriate for any recommendations requiring institutional action.

Prioritized Recommendations for Implementation by Program Staff

Due date: Program (i.e. 2012 Administration of Justice Instructional Program Review)

Prioritized Recommendations Requiring Institutional Action for Inclusion in Technology Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
1	Install smart boards in classrooms	2013	\$6000.00	When move to credence is completed
2	Install overhead projector in classroom	2013	\$800.00	When move to credence is completed

Appendix A

Fire Technology 2012/2013

A.S. Degree _____

Certificate of Achievement _____

I.	A.S. Degree requires 60 Units	_____
	Certificate of Achievement requires 42 Units	_____
II	A minimum GPA of 2.00 /and a grade of 'C' or better in each core course.	_____
III	Required Core Courses: 18 Units	
_____	FS 3 Fundamentals of Fire Prevention	3 units
_____	FS 4 Fire Protection Equipment and Systems	3 units
_____	FS 5 Fire Organization and Management	3 units
_____	FS 6 Building Construction for Fire Protection	3 units
_____	FS 13 Fire Behavior and Combustion	3 units
_____	FS 14 Principles of Fire Safety and Survival	3 units
IV	Required Electives: 12 Units (Select from the following)	
_____	EMT 60 Emergency Medical Technician	5 units
_____	EMT 61 Emergency Medical Technician	1 units
_____	FS 20 First Aid-CPR for public employees	0.5 units
_____	FS 21 First Responder – Medical	2 units
_____	FS 23 Ignitions Operations	1.5 units
_____	FS 26 Basic Air Operations (S270)	1 units
_____	FS 49 Fire Technology Work Experience	1-4 units
_____	FS 52 Incident Command System (I-200/300)	2 units
_____	FS 55 Fire Investigation	3 units
_____	FS 56 Helicopter Crewman (S271)	2 units
_____	FS 57 Auto Extraction	0.5 unit
_____	FS 60 Wildland Firefighter (CDF Basic 67)	3 units
_____	FS 60A Basic Firefighter (CDF Hand Crew)	3 units
_____	FS 61 Basic Firefighter Training (Basic 32)	2 units
_____	FS 62 Training Instructor 1-B	2.5 unit
_____	FS 62A Training Instructor 1-C	2.5 unit
_____	FS 63 Training Instructor 1-A	2.5 unit
_____	FS 66 Fire Prevention 1-A	2 units
_____	FS 67 Fire Prevention 1-B	2 units
_____	FS 69 Fire Management 1	2 units
_____	FS 70 Dozer Boss (S-232)	1 unit
_____	FS 70A Single Resource Boss Academy	1 unit
_____	FS 70B Engine Boss (S-231)	1 unit
_____	FS 72 First Responder – Hazardous Materials	2 units
_____	FS 73A Incident Business Management (S-260/261)	2 units
_____	FS 73B Incident Business Management (S-260/261)	2 units
_____	FS 74 Fire in the Interface (S-215)	1 unit
_____	FS 75 Fire Behavior (S-290)	2 units
_____	FS 76 Firefighter Type 1 (Squad Boss) (S-131)	0.5 unit
_____	FS 77 Human Factors on the Fire line (L-180)	0.5 unit
_____	FS 78 Leadership (L-280)	1 unit
_____	FS 79 Ground Support Unit Leader (I-355)	1.5 units
_____	FS 82 Fire Command 1-A	2 units

_____	FS 83	Fire Command 1-B	2 units
_____	FS 84	Lessons Learned	1 unit
_____	FS 85	Understanding Maps, Compass & GPS	1 unit
_____	FS 86	Emergency Vehicle Operations	0.5 unit
_____	FS 87	Expanded Dispatch Recorder (D-110)	1 unit
_____	FS 88	Initial Attack Incident Commander (S-200)	1 unit
_____	FS 89	Wildland Chainsaws (S-200)	1 unit
_____	FS 90	Portable Pumps and water Use (S-211)	1 unit
_____	FS 98.18	Annual Fire Refresher Training	0.5 unit
_____	FS 98.20	Annual Hired Equipment Refresher Training	0.5 unit
_____	FS 98.21	Volunteer Firefighter Academy	2.5 unit

FS 150 National Incident Management System (NIMS700) is available and is recommended for employees of Emergency Response Agencies.

Lassen College

Wildland Organized Crew Academy

Certificate of Accomplishment

List of Courses

1. FS 21 First Responder Medical 2 units
2. FS 49 Work Experience 1 unit
3. FS 61 Basic 32 2 units
4. FS 74 Fire in the Interface 1 unit
5. FS 84 Lessons Learned 1 unit
6. PEAC 32 0.5 unit

Justification for Certificate of Accomplishment

In response to inquiries from the U.S. Forest Service, we have identified the need to develop a certificate program that will assist Lassen College students in gaining the necessary training to potentially participate on an organized fire crew. We have selected a list of classes that will provide the knowledge and skills essential to the entry level fire fighter. Students that enroll and/or complete these classes may be offered an opportunity to serve on an organized crew upon request of the U.S. Forest Service.

Two Year course scheduling	Fall	Spring	Summer	Fall	Spring
Course Title	2013	2014	2014	2014	2015
Fundamentals of Fire Prevention		X			
Fire Protection Equipment and Systems	X				
Fire Organization and Management	X				
Building Construction for Fire Protection				X	
Fire Behavior and Combustion				X	
Principles of Fire Safety and Survival					X
First Aid/CPR for Public Employees		X			X
First Responder -Medical	X	X		X	X
Basic Air Operations		X			X
Ignitions operations		X			
Fire Technology Cooperative Work Experience	X	X	X	X	X
Incident Command System (I-200/300)	X				
Fire Investigation	X				
Helicopter Crewman (S-271)					X
Auto Extraction		X			X
Wildland Firefighter (CDF Basic 67)		X			X
Basic Firefighter Training (Basic 32)		X	X		X
Training Instructor 1-B		X		X	
Training Instructor 1-A		X			X
Training Instructor 1-C					X
Fire Prevention 1-A				X	
Fire Prevention 1-B					X
Fire Management 1				X	
Dozer Boss (S-232)					X
Single resource Boss Academy		X			
Engine Boss (S-231)					X
First Responder - Hazardous Materials	X			X	
First Responder - Hazardous Materials Refresher	X			X	
Incident Business Management (S-260)				X	
Applied Interagency Incident Business Management				X	
Fire in the Interface (S-215)				X	
Fire Behavior (S-290)		X			
Squad Boss	X				
L-180 Human Factors		X			
L-280 Leadership					X

Ground Support Unit Leader (I-355)		X			
Fire Command 1A		X			
Fire Command 1B				X	
Lessons Learned		X			
Understanding Maps Compass & GPS	X				
Emergency Vehicle Operation			X		
Expanded Dispatch Recorder (D-110)		X			
Initial Attack Incident Commander (S-200)				X	
Wildland Fire Chainsaws (S-212)		X			
Portable Pumps and Water Use		X			
Volunteer Firefighter Academy		X			X
Emergency Medical Technician				X	
Annual Fire Refresher Training		X			X
Annual Hired Equipment Refresher Training		X			X
NIMS S-700					
Volunteer Firefighter Academy		X			X

APPENDIX C

**FIRE TECHNOLOGY INSTRUCTIONAL PROGRAM REVIEW:
STATUS OF CURRICULUM REVIEW May 10, 2013**

Course	Curriculum Committee Review Completed	Curriculum Committee Review Not Completed
FS 1	Inactivated 4/5/11	
FS 3	3/8/11	
FS 4	3/8/11	
FS 5	3/8/11	
FS 6	3/8/11	
FS 13	3/8/11	
FS 14	3/8/11	
FS 20	11/28/12	
FS 21	8/29/12	
FS 23	12/15/11	
FS 26	9/24/12	
FS 49	4/5/11	
FS 52	3/8/11	
FS 55	3/8/11	
FS 56	New course 11/15/12	
FS 57	8/29/12	
FS 60	4/5/11	
FS 60A	3/8/11	
FS 61	11/28/12	
FS 62	8/29/12	
FS 63	8/29/12	
FS 66	8/29/12	
FS 67	8/29/12	
FS 69	8/29/12	
FS 70	9/19/12	
FS70A	9/19/12	
FS 70B	9/19/12	
FS 72	8/29/12	
FS 72A	New Course 11/13/12	
FS 73A	3/8/11	
FS 73B	3/8/11	
FS 74	7/3/12	
FS 75	7/3/12	
FS 76	10/18/18	
FS 77	3/8/11	
FS 78	9/19/12	
FS 79	New Course 11/15/12	
FS 82	8/29/12	
FS 83	8/29/12	
FS 84	3/8/11	
FS 85	3/8/11	
FS 86	New Course 6/15/11	
FS 87	12/15/11	
FS 88	12/15/11	
FS89	New Course 3/20/13	
FS90	New Course 3/20/13	
FS 98.18	3/8/11	
FS 98.20	8/29/12	
FS 98.21	8/29/12	
FS 156	3/8/11	

Degree/Certificate	Curriculum Committee Review Completed	Curriculum Committee Review Not Completed
AS Fire Technology	5/10/11	
CA Fire Technology	5/10/11	
CA Wildland Organized Crew Academy	9/10/12	

APPENDIX D

LASSEN COMMUNITY COLLEGE INSTRUCTIONAL PROGRAM REVIEW - STUDENT EVALUATION

Name of Program: **Fire Technology**
Current Course: **FS 21 – First Responder**

Date Survey Completed: **February 23, 2011**

Overview:

Instructional programs are reviewed every six years by the institution. The **Fire Technology** Instructional Program is currently undergoing its periodic review. The **Fire Technology** Instructional Program is made up of the courses leading to a degree or certificate of achievement in **Fire Technology**. The courses in this program include: **Fire Science Courses**.

As a student enrolled in one of these courses, your insight about the course and program can provide valuable information to assist the program faculty in making program improvements. This student survey is your opportunity to provide information to the program faculty. This is a student survey of the course and program, **NOT** the instructor. Instructor evaluations occur at a different time.

Instructions for Completion:

Please be as objective and concise as possible when answering the following questions. Read and evaluate each question and check the responses, which most closely relate to your views. Space has been provided at the end, for any additional comments you would like to make.

Tell Us About Yourself:

1. Educational Goal: What is your educational objective at Lassen Community College? (Check all that apply).

General Education:	Degrees/Certificates:	General Interest:
1 Transfer to 4-year Institution	9 AA/AS	7 Job Requirement
1 Certificate of Achievement		8 Continuing Education
1 Certificate of Completion		10 Personal Development
3 Certificate of Accomplishment		
UNR Certification		
Transfer to another community college	Title of degree or certificate: First Responder	

2. Your Need for this Course: Why are you taking this course?

6 Core Requirement for degree or certificate	7 Job Requirement
3 Elective for degree or certificate	6 Continuing Education
General Education course for degree or transfer	9 Personal Development
3 Other: Please Specify: 1. For my business. 2. Fire Fighter 1 3. Pre-requisite for EMT 13.	

3. Type of Course

Lecture only	Laboratory only
19 Lecture/Laboratory Combination	2 Activity Course

4. Does the course content reasonably compare with the catalog/schedule description?

19 yes	1 no
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5. Did the catalog clearly explain the order in which the courses in this program should be taken?

17 yes	2 no
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6. Was any cost for this course/program, beyond registration and books clearly identified in the catalog?

16 yes	4 no
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7. Did the course require a textbook?

20 yes	no
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- 1. But it was the wrong workbook.**
- 2. They gave the wrong book.**
- 3. But the wrong workbook was ordered at first.**
- 4. Bookstore provided wrong workbook for class.**

If yes, was the textbook(s) for this course adequately used?

19 yes 1 no

8. Was a syllabus for the course provided at the beginning of the course?

19 yes no

If yes, did the syllabus clearly identify the student learning outcomes for this course?

19 yes no

Scheduling:

8. Did the scheduling of this course meet your needs?

17 current schedule met my needs

2 needed afternoon offering

1 needed evening offering

9. The scheduling of this course:

18 resulted in no scheduling conflicts

1 conflicted with other core (required) courses in the program

1 conflicted with elective courses in the program

1. The college gave us a day off in the middle of mid term.

Facilities/Equipment:

10. Do the on-campus facilities for this course/program adequately meet your needs?

17 I was provided with reasonable access to the facilities

The facilities were unavailable at times that I could use the facility.

12 The temperature of the facilities was comfortable.

The temperature of the facilities was frequently too hot.

3 The temperature of the facilities was frequently too cold.

2 Not applicable

16 The lighting in the facilities was adequate

The lighting in the facilities was too bright

The lighting in the facilities was too dark

Not applicable

15 The chairs/tables/desks were adequate

2 The chairs/tables/desks were inadequate

12. Did the course/program provide the necessary equipment?

18 Sufficient equipment for the number of students

2 Insufficient equipment for the number of students

Not applicable

16 Sufficient time on equipment was allowed for each student

1 Insufficient time on equipment was allowed for each student

Not applicable

13 Equipment was current up-to-date

2 Equipment was out dated

1 Not applicable

17 Equipment was generally in good operating condition

13. Describe how this course/program could be improved to better meet the needs of the students at Lassen Community College.

1. Chalk boards need to go!! This causes allergy problems for some.

2. Mid-Day classes for athletes

3. I feel for the amount of hours the course is it should be bumped up to 3 units or let the class be a few more days a week and less hours.

4. Class book not adequate.

5. Don't have a mid week day off right at mid term.

1. More classes closer in time to avoid numerous trips back and forth.
2. Need more NWSG courses.
3. Couple weeks longer.
4. For me I like how this course is going.
5. The only problem I ran into is having to wait for the availability of needed classes.

14. Provide any additional comments on the course or program:

1. The more courses the better for each semester.
2. From when I started this program has made huge leaps in impr

LASSEN COMMUNITY COLLEGE
INSTRUCTIONAL PROGRAM REVIEW - STUDENT EVALUATION

Name of Program: **Fire Science**

Date Survey Completed: **February 28, 2011**

Current Course: **Volunteer Fire Academy**

Overview:

Instructional programs are reviewed every six years by the institution. The **Fire Science** Instructional Program is currently undergoing its periodic review. The **Fire Science** Instructional Program is made up of the courses leading to a degree or certificate of achievement in **Fire Science**. The courses in this program include: **Fire Science**.

As a student enrolled in one of these courses, your insight about the course and program can provide valuable information to assist the program faculty in making program improvements. This student survey is your opportunity to provide information to the program faculty. This is a student survey of the course and program, **NOT** the instructor. Instructor evaluations occur at a different time.

Instructions for Completion:

Please be as objective and concise as possible when answering the following questions. Read and evaluate each question and check the responses, which most closely relate to your views. Space has been provided at the end, for any additional comments you would like to make.

Tell Us About Yourself:

1. Educational Goal: What is your educational objective at Lassen Community College? (Check all that apply).

General Education:	Degrees/Certificates:	General Interest:
1 Transfer to 4-year Institution	11 AA/AS	4 Job Requirement
IGETC	3 Certificate of Achievement	4 Continuing Education
CSU Certification	1 Certificate of Completion	4 Personal Development
	1 Certificate of Accomplishment	

2. Your Need for this Course: Why are you taking this course?

4 Core Requirement for degree or certificate	5 Job Requirement
8 Elective for degree or certificate	7 Continuing Education
1 General Education course for degree or transfer	6 Personal Development

3. Type of Course

Lecture only	Laboratory only
10 Lecture/Laboratory Combination	4 Activity Course

4. Does the course content reasonably compare with the catalog/schedule description?

15 yes	no
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5. Did the catalog clearly explain the order in which the courses in this program should be taken?

13 yes	2 no
--------	------

6. Was any cost for this course/program, beyond registration and books clearly identified in the catalog?

7 yes	8 no
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7. Did the course require a textbook?

15 yes	no
--------	----

If yes, was the textbook(s) for this course adequately used?

15 yes no

Need better explanation of book cost in catalog.

8. Was a syllabus for the course provided at the beginning of the course?

15 yes no

If yes, did the syllabus clearly identify the student learning outcomes for this course?

15 yes no

Scheduling:

8. Did the scheduling of this course meet your needs?

15 current schedule met my needs

9. The scheduling of this course:

14 resulted in no scheduling conflicts

1 conflicted with general education courses

Facilities/Equipment:

10. Do the on-campus facilities for this course/program adequately meet your needs?

15 I was provided with reasonable access to the facilities

The facilities were unavailable at times that I could use the facility.

7 The temperature of the facilities was comfortable.

3 The temperature of the facilities was frequently too hot.

2 The temperature of the facilities was frequently too cold.

2 Not applicable

10 The lighting in the facilities was adequate

10 The chairs/tables/desks were adequate

12. Did the course/program provide the necessary equipment?

15 Sufficient equipment for the number of students

13 Sufficient time on equipment was allowed for each student

11 Equipment was current up-to-date

2 Equipment was out dated

Not applicable

13 Equipment was generally in good operating condition

13. Describe how this course/program could be improved to better meet the needs of the students at Lassen Community College.

1. Updated equipment (SCBA's specifically) own room for physical training, other than that, it's great.

2. Nope its good.

3. Course description said volunteer fire academy. This academy is for all people who wish to take it catalog should specify.

4. More day.

5. Good course.

6. I like how it is running.

7. More updated equipment would be useful and actual air in SBCA tanks would give a more "real life" feel to the course.

8. It's very good. It met and improved my needs.

14. Provide any additional comments on the course or program:

1. Excellent training be prepare to P.T.

2. It's good.

3. Water needs to be faciliated.

4. Its BRUTAL!

Mr. Dave Trussell, Subject Area Faculty Signature Date

Ms. Cheryl Aschenbach, Curriculum and Academic Standards Committee Chair Signature Date

Ms. Sue Mouck, Vice President/Dean of Academic Services Signature Date

Appendix E

Lassen College Instructional Program Review
2013 Fire Technology IPR Annual Update

Prioritized Recommendations Requiring Institutional Action for Inclusion in Education Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
2, 4	30 Fire Shelters	Immediate	10500	Support student job training, job placement opportunities, and safety
2, 4	40 one person tents	Immediate	6440	"
2, 4	20 Red Bags	Immediate	1220	"
2, 4	40 Nomex pants	Immediate	5280	"
2, 4	40 Nomex shirts	Immediate	5000	"
2, 4	15 Initial attack packs	Immediate	2250	"
2, 4	1 Roll chainsaw chain	Immediate	200	"
2, 4	2 Trauma Kits	Immediate	500 ea	
2, 4	4 hand held radios	immediate	3000	
2, 4	1 Unit Misc. Lumber	Immediate	1500	"
2, 4	2 Chainsaws	Immediate	1000	"
2, 4	20 Misc. Handtools	Immediate	1000	"
2, 4	10 GPS Units	Immediate	1500	"
2, 4	10 Kestrel Weather Units	Immediate	1660	"
2, 4	2 Fire Buggies	Immediate	12000	"

2013 Fire Technology IPR Annual Update

Prioritized Recommendations Requiring Institutional Action for Inclusion in Human Resource Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
3	Full-Time Instructor	Immediate	90,000	Increase course and section availability
4	Administrative Assistant	Immediate	60,000	Increase support of program and enhance student success

2013 Fire Technology IPR Annual Update

Prioritized Recommendations Requiring Institutional Action for Inclusion in Facilities Master Plan

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
10	Additional class Space	Immediate	0	Provide space for additional sections
9	Acquire Public Safety Training Facility (i.e. Creedence High School Complex)	Immediate	Unknown	Provide all inclusive space for Fire technology program including storage, offices, classroom, outdoor training