**Academic Program Review: Self-Study**

***Instructions:*** *The following pages will guide your submission of your comprehensive self-study. Please type your responses directly into the document. The completed self-study instrument and all attachments must be submitted to the Academic Program Review Coordinator by* ***October 1****.*

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| **Program Under Review:** |
| Degree(s): Fire science  |
| Certificate(s): Wildland, Firefighter Operations |
| Contact Information for lead on Self-Study: Name: John KempCampus: Signal peakPhone: 520-494-5507Email: john.kemp@centralaz.edu |

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| **Program Mission** |
| What is the mission of the program:The mission of the Central Arizona College Fire Science Division is to provide training and educational programs that support the County's current and projected training and educational initiatives. Continue to maintain and improve the educational goals, lifelong learning expectations and the quality of life for our citizens, students and members of public safety. |
| Describe how the program mission aligns with the College’s Mission:The mission of the fire science program aligns with the collaborative efforts of the college and related public Safety programs to provide affordable and accessible educational and training that allows personal growth opportunities.  |
| What are the outcomes for the degree or certificate: The degree and certificates programs are developed to provide the student with courses that are recognized at the local and national levels of the fire service. The courses that are completed for the degree or certificate programs will provide students the opportunities to obtain the expectations of lifelong learning and to enable the student to choose a path toward their specific employment and/or promotional goals.  |
| Who is responsible for reviewing and updating the outcomes:John Kemp as the CAC program Chair person with advisement support from The Arizona Center for Fire Service Excellence (AZCFSE) the International Fire Service of Accreditation Congress (IFSAC), the National Fire Protection Association (NFPA) and the National Wildland Coordinating Group (NWCG).  |

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| **Program Enrollment and Graduation Trends** |
| Summarize the program enrollment trends for the past 3 years: Fire Science/Technology 2008-2011, 11-AAS Degrees. 2008-2011 0-Program Certificate  |
| What factors are influencing enrollment trends:The current factors that surround the improvement of the economy are the catalyst to our enrolment trends. However, the fire service continues to promote training and educational initiatives that evolve successful completion of degree and certificate programs to enhance internal promotional opportunities. The demand for the community’s fire and life safety services, trained personnel, and employment opportunities continue to grow as the economy improves.  |
| How has the program typically recruited students:The CAC fire science program reaches out to Pinal county fire service, fire explorer programs, Community High Schools, and Central Arizona Valley Institute of Technology (CAVIT).  |
| Discuss the program graduation rate trends for the past 3 years: 2008-2011, 11-AAS Degrees |

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| **Program Curriculum** |
| Discuss the strengths and weaknesses of the current program curriculum for each degree/certificate. Compare the CAC program to three other similar programs (ideally a program in Arizona, but out of state if necessary). Currently the CAC degree and certificate programs have not attempted a fire service accreditation that allows international recognition. The current degree and certificates available will need to be revised and certificates added to adequately meet the objectives of our mission statement and the need of our current and potential fire service members.  |
| Discuss how the program gets feedback on its program and curriculum from external **sources, such** as advisory boards or employers.The fire science program obtains advisement support from The Arizona Center for Fire Service Excellence (AZCFSE), The Pinal county fire chiefs association PCFCA, the Arizona Fire Chiefs Association (AZFCA) and local tribal fire departments.  |
| Discuss any external accreditations which the program has. Are there any available accreditations which the program does not have, but maybenefit from seeking?There are currently no accreditations for the fire science program. However, the fire science program plans to pursue the fire science degree program accreditation through the International Fire Service Accreditation Congress in 2013-2014. |
| Discuss how the program meets current or future needs for the job market in the county or state of Arizona:Our courses are designed to expose the student to a wide range of information and practical knowledge that applies to the fire service and all components of public safety. The goal of the fire science program is for our courses and curriculum to maintain an approach toward academic and agency cohesion to meet the ongoing changes of local and national standards. Most courses completed through the fire science program are eligible for third party evaluation through the State of Arizona and accredited through IFSAC. This process will enable the student to qualify for local, state and international employment. The Firefighter Operations Certificate of Completion is designed to prepare future firefighters for a career in the fire service. The program curriculum and course of instruction will provide the student with the knowledge and skills to effectively perform the essential functions of an entry level firefighter. Upon successful completion of the fire Academy, students sit for the State proctored written and practical skills examinations; successful students will be awarded State of Arizona certification through the Arizona Center for Fire Service Excellence Fire Service (AZCFSE) International Fire Service Accreditation Congress (IFSAC). The Wildland Firefighter Certificate of Completion is designed to prepare future firefighters for a career in the Wildfire Industry. Successful completion will provide the student with with (National Wildland Coordination Group (NWCG) credentials that lead up to the level of Single Resource Boss. AZfiretraining.org, NWCG.org, NFPA.org, IFSAC.org, FEMA.org The Fire Science uses the students successful outcome of examination and employment opportunity to measure the effectiveness of the program. |
| If your degree is a transfer degree please answer the following question:Identify specific baccalaureate programs for which this program is intended for transfer to: Possibly specific courses through transfer with ASU, NAU, UA |

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| **Program Resources** |
| Discuss the adequacy of the financial and budgetary resources available to the program over the past 3 years:Unable to determine this information from a historical value. The current budgetary process and resources are currently under review. |
| Discuss the adequacy of the human resources available to the program over the past 3 years:My position is currently the only position that is performing the task required to maintain the programs work load and operational objectives. The human resource necessities are currently under review.The program currently meets the requirements of qualified part-time faculty. |
| Discuss the adequacy of the technological resources available to the program over the past 3 years:Unable to determine this information from a historical value. The current technological resources utilized are provided by the college. This process and compatibilities for fire science are currently under review. |
| Discuss the adequacy of the physical (building space, classrooms, labs, etc) resources available to the program over the past 3 years:Unable to determine this information from a historical value. However, The class rooms at each campus are scheduled in advanced and are adequate for the delivery of fire science academics. The program will need to seek other alternatives for academic delivery of fire science programs at SPC that are related to the fire I & II courses. The CAC operated public safety training facility provides an adequate level of props, equipment and resources for labs and practical skills training. Currently, with the projection of future expansion of advanced level training and educational opportunities, this topic will need to be revisited.  |
| Discuss the adequacy of the academic support resources available to the program and its students over the past 3 years:Unable to determine this information from a historical value. However, the current academic support resources such as the utilization and availability of standardized text books, the utilization of black board, tutorial services, group study sessions and the usage of the CAC library meet current standards and continue to improve.  |
| Discuss the adequacy of the student support resources available to the program and its students over the past 3 years:Unable to determine this information from a historical value. However, the current CAC student support resources meet current standards and continue to improve.  |

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| **Program Effectiveness** |
| Describe how well degree program graduates achieve the college’s general education outcomes during the past 3 years:Students are employed by fire departments, industry and agencies within the public safety system. Typically this will occur locally with the option to obtain employment out of State.  |
| Describe how you measure the success of degree and certificate program graduates in achieving the program outcomes and how well students have achieved these outcomes during the past 3 years.Unable to determine this information from a historical value. This program and statistical data is currently under review |
| **If your degree is a transfer degree please answer the following questions:** |
| What percentage of the program enrollees transfer to a baccalaureate level institution?Unable to determine this information from a historical value. This program and statistical data is currently under review |
| Describe the level of success programs students achieve at transfer institutions.This program and statistical data is currently under review |
| Describe the success of students who do not transfer to baccalaureate level institution in obtaining a job in the field of study upon graduation:Unable to determine this information from a historical value. This program and statistical data is currently under review |
| **If you degree or certificate leads directly in to the work place please answer the following questions:** |
| Describe the success of students in obtaining a job in the field of study upon graduation: Unable to determine this information from a historical value. This program and statistical data is currently under review. However, students that pursue a career in public safety are required to possess certificates and/or degrees to advance or promote from basic level firefighter. Pinal County fire Chiefs have started to create training/education committees and working relationships between county fire departments and the Central Arizona College.(AZChiefs.org, AZfiretraining.org)  |
| How many certificate completers continue their studies at CAC:Unable to determine this information from a historical value. This program and statistical data is currently under review. |
| How many degree completers continue their studies another institution:Unable to determine this information from a historical value. This program and statistical data is currently under review. |

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| **Program Continuous Quality Improvement** |
| Discuss how the program has used learning outcome assessment results to improve instruction over the past 3 years:Unable to determine this information from a historical value. However, all learning outcomes are bases on CAC policy and national requirements.  |
| Discuss how the program has used operational planning goals to achieve quality improvement over the past 3 years:Unable to determine this information from a historical value. However, we are currently working through our first year of strategic planning process by evaluating the completion of the 2012-2013 planning and developing our 2013-2014 planning.  |
| Describe other ways the program has engaged in continuous quality improvement:The fire science program, staff and administration has taken a methodical approach toward the improvement of each program component that will have an effect on the successful outcome of the programs overall mission. Pinal County fire Chiefs have started to create training/education committees and working relationships between county fire departments and the Central Arizona College. (AZChiefs.org, AZfiretraining.org) **The Fire Science Program is currently participation in the CAC Course Level Assessment Plan and is expected to be complete in the Spring 2013** |

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| **Program Alignment with Institutional Goals** |
| Describe how the program has directly or indirectly is helping the College achieve each of its current strategic goals. If you believe the goal is inapplicable to the program indicate so. |
| Strategic Goal 1: Ensure broad access to high-quality innovative educational programs, services and training opportunities for Pinal County residents: The fire science program staff and administration continues are efforts toward understanding and supporting the overall educational goals of the Pinal County residence and members of public safety. Current planning efforts are specifically related to high quality innovative program services and training opportunities that meet the community’s fire and life safety needs. The focus continues to be directed toward the needs of the existing local and national standards and is driven by the overall support of the college and fire service administrations. Pinal County fire Chiefs have started to create training/education committees and working relationships between county fire departments and the Central Arizona College. (AZChiefs.org, AZfiretraining.org) NWCG.org, NFPA.org, IFSAC.org, FEMA.org |
| Strategic Goal 2: Improve student retention, persistence, completion and job placement:This component of our program has been recognized as a valuable process to measure our success. The process for obtaining this statistical data is part of our current planning and strategic development process.  |
| Strategic Goal 3: Ensure a safe, sustainable environment that promotes learning, communication, diversity and satisfaction among students, faculty and staff:This component has been recognized by all staff members of the fire science program as a top priority and continues to improve through adherence to collage policy, process evaluation and continued education.  |
| Strategic Goal 4: Enhance our physical and technological infrastructure to support changes in the learning and work environment:The fire science program continues to utilize current support staff and college services to maintain current physical resources and technological infrastructure. Enhancing this process is currently part of our planning and strategic development process.  |
| Strategic Goal 5: Expand partnerships with Universities to provide advanced degrees to Pinal County residents:Currently not applicable. However, the fire science program is interested in the pursuit of this opportunity for our students.  |
| Strategic Goal 6: Obtain approval from the state and regional accreditation body to offer baccalaureate degrees at CAC:Currently not applicable. However, the fire science program is interested in the pursuit of this opportunity for our students.   |
| Strategic Goal 7: Optimize fiscal resources that support the needs and expectations of students and the community:The fire science program recognizes this responsibility and is currently seeking options toward enhancing this process during our current planning and strategic development process.  |
| Strategic Goal 8: Contribute to the economic vitality, workforce development, and job training needs of Pinal County and surrounding region:The fire science program recognizes this responsibility and is currently seeking options toward enhancing this process during our current planning and strategic development process.  |