

## **Certificate of Advanced Study in Research Methods**

### **1. Proposed title and name of academic units offering the program**

New Certificate of Advanced Study Title: Certificate of Advanced Studies in Research Methods is housed in the Kremen School of Education and Human Development, Curriculum and Instruction Department

### **2. School Program which have approved of the CAS in Research Methods in the KSOEHD**

Master of Arts in Education

Option in Curriculum and Instruction

Option in Counseling and Student Services

Option in Multilingual/Multicultural Education

Option in Reading/Language Arts

Option in Educational Leadership and Administration

Master of Arts in Special Education

Master of Arts in Teaching

Master of Science in Counseling

Pupil Personnel Services

Student Affairs and College Counseling

Marriage, Family, Child Counseling

Master of Science in Rehabilitation Counseling

No options, concentrations, or special emphases already exist under the degree programs listed above, although some of the proposed courses in this CAS are taken by students in these programs.

### **3. Letters of support**

Letter of support from Dean Beare ([Letter Beare.pdf](#)).

Letter of support from Department Chair Dr. Benninga ([Letter Benninga.pdf](#)).

### **4. Purpose**

The purpose of the Certificate in Advanced Study (CAS) in Research Methods is to build research infrastructure at CSUF and in the Central Valley, to train CSUF graduate students to become education research methodologists who are capable of and eager to undertake research studies that address the pressing issues in American education today especially those in the Central Valley, and to be prepared to pursue doctoral studies. Realizing this purpose will involve providing quality training in quantitative and qualitative research methods used in education, an intensive applied research experience under the direction of accomplished experts, and instruction and practice in scholarly writing and oral communication.

This CAS in Research Methods is predicated on two basic assumptions: 1) sound knowledge and skills in research methods comprise a powerful tool for gathering information, examining data, drawing valid conclusions, creating knowledge, guiding optimal decision making, and improving outcomes and

conditions for students and their families in this region and the nation as a whole, and 2) such knowledge and skills can be appropriately applied to many issues in the field of education. Therefore, painted with a broad brush to encompass the multiple topics our research students will encounter over the course of their careers, the goal of this CAS in Research Methods is to provide rigorous quantitative, qualitative and mixed methodological training.

5. Learning outcomes and SOAP ([CAS Res Meth SOAP.docx](#)).

6. Need

Education researchers with knowledge and skills in quantitative, qualitative and mixed methods are needed to address educational issues, to conceptualize research questions, and to examine what will be effective in preparing a literate and educated populace in our diverse country. This is particularly true for those students living in the Central Valley and attending CSUF due to the general lack of educational attainment and high poverty in this region.

Most of the eight counties that make up the Central San Joaquin Valley have for decades borne the brunt of chronically high jobless rates, poverty, and a large pool of unskilled labor. In addition, 28.6% of the population of Fresno County is below the poverty level vs. 16.8% of the population in the State. The city of Fresno ranks #2 among the 100 largest metro areas in the US on its overall poverty level (Brookings Institute, 2013). As the sole major comprehensive university in our vast service area, our university plays a critical role in making higher education available and affordable for all of our students, but particularly for the overwhelming numbers of Fresno State's underserved students.

Providing training in research methods to CSUF students is one of the best way to grow local talent to solve the Valley's socio-economic problems. In Fall 2014, Fresno State enrolled 20,490 undergraduate, 2,162 graduate and 527 post baccalaureate students (Fresno State Office of Institutional Effectiveness (OIE), 2014a). The Fresno State Office of Institutional Effectiveness also reports that in the Fall 2014, of all Fresno State students 43.4% were Hispanic (2014b) and 6.3% were Hmong, an Asian minority (2014b). Again in Fall 2014, this richly diverse student population was also 64.7% low-income (Pell eligible) (Fresno State OIE, 2014e) and 72% first-generation college students (Fresno State OIE, 2014f). The extent to which Fresno State is the conduit for higher education in its vast region is evidenced by Fresno State undergraduates supplying 63.7% of Fresno State graduate students (Fresno State OIE, 2014c).

Fresno State's Kremen School of Education and Human Development has been highly successful in supporting and training Hispanic and other underrepresented groups to timely and successful completion of credentials, master's and doctoral degrees in education. The CAS in Research Methods will become part of these proactive initiatives by training students in research methods and skills, by providing opportunities to hone these skills with faculty experts who can guide students to develop their capacities to the fullest, and by mentoring students into doctoral programs.

The need for research methods training is further supported by the fact that two superintendents have recently contacted the Kremen School of Education and Human Development to secure additional research training for their employees in their research and evaluation departments. Talks to establish these programs are currently underway.

#### Survey of student interest

To establish the viability of recruiting students into the CAS in Research Methods, a survey was conducted in several of our existing research classes. A total of 110 students enrolled in ERE 153 or ERE 220 during Fall 2015 and Spring 2016 (a total of five courses) answered our questions about their interests in a Certificate Program. Here are some results of this survey:

- The vast majority of students said that they are considering a career where they would need to have evaluation skills (“yes” - 72.7%), and some of them were not sure (“maybe” – 22.7%). Only a few students do not consider such career (“no” – 4.5%).
- A number of our students are planning to apply for a doctorate or a Ph.D. degree (14.5%), and almost half of our students said that they might apply for a doctorate or Ph.D. degree at some point in the future (44.5%).
- Many students expressed their interest in a Certificate of Advanced Study in Research Methods at Fresno State:
  - Extremely interested (9.2%)
  - Interested to some degree (35.8%)
  - It sounds interesting but it is not for me (38.5%)
  - Absolutely not interested (16.5%)

During Fall 2015, we also asked two additional questions about students’ interest in an advanced statistics class and in a qualitative class (N = 65 students from 3 courses). The results showed that:

- 18.7% of students responded that they are “extremely interested” or “interested” in an advanced statistics class (with 20.3% of students being “neutral”); and
- 32.3% of students responded that they are “extremely interested” or “interested” in a qualitative class (with 23.1% of students being “neutral”).

These results are supportive of our endeavors to create the CAS in Research Methods and our potential to recruit an appropriate number of students for this program.

#### 7. Matrix of Courses (See attached syllabi.)

Course Number	Course Title	Units	Catalog Description Link	Course Syllabus Link
ERE 153	Educational Statistics	3	<a href="#">Course Descriptions Certificate of</a>	<a href="#">ERE153EducationalStatistics R.docx</a>

			<a href="#">Advanced Study R.docx</a>	
ERE 220	Research in Education	3	<a href="#">Course Descriptions Certificate of Advanced Study R.docx</a>	<a href="#">ERE220 Research in Education R.docx</a>
ERE 260	Assessment as Learning	3	Course Descriptions Certificate of Advanced Study R.docx	ERE260Assessment as Learning R.docx
ERE 288	Measurement and Evaluation	3	<a href="#">Course Descriptions Certificate of Advanced Study R.docx</a>	<a href="#">ERE288Measurement Program Evaluation R.docx</a>
ERE 287	Qualitative Research Methods in Education	3	<a href="#">Course Descriptions Certificate of Advanced Study R.docx</a>	<a href="#">ERE280TQualitative Research Methods R.docx</a>
ERE 289	Statistical Modeling	3	<a href="#">Course Descriptions Certificate of Advanced Study R.docx</a>	<a href="#">ERE 280T Statistical Modeling R (1).doc</a>

The ERE 153 is a prerequisite for all courses.

- a. New Course Application form for ERE 287 Qualitative Research Methods in Education ([New Course ERE 287 Qualitative Res.pdf](#)).
- b. New Course Application form for ERE 289 Statistical Modeling ([New Course ERE 289 Statistical Modeling.pdf](#)).

8. Catalog Copy inserts for program ([Catalog insert program.pdf](#)) and new courses ([Catalog insert courses.pdf](#)). See Table 2 above.

9. List of Faculty (See attached vitae.)

Name	Rank	Appt Status	Area of Expertise	Possible Course Assignment	Link for Vitae
Laura Alamillo	TT	Associate	Qual	287	<a href="#">Vitae Laura Alamillo.doc</a>
Juan Carlos Gonzalez	TT	Associate	Qual	220, 287	<a href="#">Vitae Gonzalez.pdf</a>
Susan Tracz (Program Coordinator)	TT	Professor	Quan, Qual, Mixed	153, 220, 260, 287, 289	<a href="#">Vitae Susan Tracz.doc</a>
Christian Wandeler	TT	Assistant	Quan	153, 220, 260, 289	<a href="#">Vitae Christian Wandeler.doc</a>
Mariya Yukhymenko	TT	Assistant	Quan	153, 220, 260, 288, 289	<a href="#">Vitae Mariya Yukhymenko.docx</a>

10. Budget Analysis

This CAS was approved by the University Budget Committee on Nov. 8, 2017.

No extra funding is needed to implement this Certificate of Advanced Study in Research Methods. Three of the courses are already provided as part of various master's degree programs and options which are already in existence. The two additional courses will be available to be taken as electives and as part of this CAS, and will function like other courses routinely offered in the KSOEHD. Although research faculty would like to hire an additional faculty member since so many research courses are taught by part-time faculty, this CAS will not necessitate additional hiring. The KSOEHD already has a Graduate Admissions Analyst who processes all applications to graduate programs, and this certificate will be part of that assignment.