# Graduate Faculty Meeting Minutes February 12, 2013, 10:00 am – 11:00 am, AGLS 129

<u>Present:</u> Scott Cummings, Deb Dunsford, Alvin Larke, James Lindner, Landry Lockett, Lori Moore, Theresa Murphrey, Manuel Pina, Summer Odom, John Rayfield, Tracy Rutherford, Gary Wingenbach, Tim Murphy, Clarice Fulton

<u>Not Present:</u> Barry Boyd, Gary Briers, Chanda Elbert, James Christiansen, Kim Dooley, Jack Elliot, Julie Harlin, Billy McKim, Jeff Ripley, Glen Shinn, Robert Strong, Andy Vestal, Jennifer Williams

#### Action/Discussion Items

1) Approval of Minutes from the January meeting

Motion was made by John Rayfield, Second by Scott Cummings to "Approve the January minutes as distributed." Motion passed unanimously.

2) Graduate Admissions Discussions – Tim Murphy

An open discussion was held about the admission of each applicant. <u>Faculty will have until February 25 at 5:00 pm. to review applicants, vote, and indicate whether wish to be an IMA (interim major advisor).</u>

Open discussion on the doctoral admission requirement of at least 3 years of full-time related work experience. Some students have been admitted without a full 3 years of professional experience. A suggestion was made to include a column in the review spreadsheet to indicate years of work experience. Also, possibly create a petition form for approval to waive less work experience. Faculty view experience differently, and use these views to inform their vote. Admission will depend on the faculty vote.

Manuel Pina indicated there are a growing number of students interested in international agriculture; yet, these students do not know what to actually do in this area. He suggests perhaps that the recruiting/interim advisor have more conversations with the students before they arrive. Suggestions included brown-bag lunch meetings, or mixers in the evenings for interested students.

3) Graduate Faculty Appointment for Don Renchie (Attachment A) – Tim Murphy

Open discussion. Motion was made by Scott Cummings, Seconded by Alvin Larke to "Submit a request to add Don Renchie to Graduate Faculty as an Associate Member and forwarded to GPC for review." Motion Passed. Clarice will prepare paperwork and forward to Dr. Reed for next GPC meeting.

4) Student Learning Outcomes/Evaluation (Attachment B) – Tim Murphy

Several discussions have taken place about the student evaluations/assessment forms. The College wants to start collecting this data and eventually compile a summary to send to OGS and a policy will be put in place soon. Faculty suggestions have been made and Dr. Murphy will forward to College for review. (Attachment B). The information collected will be beneficial in our Weave Online learning outcomes input.

- 5) Graduate Curriculum Committee Report Gary Briers No report at this time. Gary Briers not present.
  - a. International Ag Course Rotation Manuel Pina

Manuel Pina expressed that some progress has been made in bringing together the international faculty, but not a lot; no Rotation of International Courses has been proposed. As he mentioned earlier, many students are interested in this area. These students have expressed concern about the lack of a recommended program of study. Dr. Pina would like to see the faculty in this area and these students to come together. He proposes to set up a brown bag or evening mixer, titled it something like "Opportunities for International Careers" and invite all students.

6) Qualifying Examination Committee Report – Gary Wingenbach – No report at this time.

#### **Old Business**

None at that time.

#### **New Business**

- 1) A suggestion to look at the research sequence and graduate course rotation again
- 2) Re-visit the discussion of the 3 years of work experience for the doctoral programs

#### Informational Items

- 1) Graduate Degree Plans and Petitions-New Online Approval System Clarice Fulton Clarice mentioned that OGS has opened the new online approval system. Faculty will log in using NETID and password as before. This system will now include degree plans and 4 types of petition submissions; 1) Committee change; 2) Coursework change; 3) Dept, major, or program change; and 4) Waiver requirements (residency, leave of absence). It has a different look but it is user friendly. Current students with degree plans already approved in the online system will continue to make any changes to that plan by paper copy petitions. Students submitting degree plans after February 10<sup>th</sup> will use the online system for degree plan submission as in the past, however, changes will now be made in the same online system by online petitions. Clarice will set up a training session for faculty soon.
- 2) Prospective Student Day March 29, 2013, AGLS 129 Clarice Fulton A reminder -- The prospective student day has been scheduled. Faculty will see a calendar appointment coming soon.

#### Graduate Faculty Meeting Appendices (provided each month):

- 1) Graduate Admission Criterion Score Calculation/GRE Percentile Rankings (Attachment C)
- 2) Faculty "Stewardship" of Course Rotation (Attachment D)
- 3) Five Year Course Rotation (Attachment E)

# **Travel Request Form Deadlines**

Domestic (30 days prior to trip):
e.g. travel March 1, 2013 due by February 1, 2013
International (60 days prior to trip):
e.g. travel April 1, 2013 due by February 1, 2013

#### **Upcoming Events/Meetings**

March 7, 2013	Departmental Meeting, 9:00 am, AGLS 129
March 15, 2013	Spring Break Holiday
March 29, 2013	Prospective Student Day, AGLS 129
April 2, 2013	Departmental Meeting, 2:00 pm, AGLS 129
April 12, 2013	ALEC Awards Reception, 2-4 pm, Agrilife Center
May 6, 2013	Departmental Meeting, 9:00 am, AGLS 129
May 19-22, 2013	AIAEE, Fort Worth
May 21-24, 2013	National AAAE, Columbus, Ohio
August 19-21, 2013	D@D Cohort 6 Induction, Lubbock, TX

#### **Future Graduate Faculty**

March 7, 2013, 1:00 pm, AGLS 129 April 2, 10:00 am, AGLS 129 May 6, 1:00 pm, AGLS 129

# **CURRICULUM VITAE**

# Don LaRosa Renchie, Ph.D.

Assistant Professor, Extension Program Leader and Specialist, and Coordinator-Pesticide Safety Education Program

Agricultural and Environmental Safety Unit

Texas A&M AgriLife Extension Service Texas A&M University System

December 2012

# Don LaRosa Renchie Curriculum Vitae

# **Table of Contents**

Stater	ment on Teaching, Research, Extension and Service	. 4
I.	Personal Information	. 6
II.	Education	. 6
III.	Position Description	. 6
	Program Development	. 7
	Educational Programs for Clientele	
	Organizational and Program Support	
	Coordination and Cooperation	
IV.	Past Experience.	
<b>V.</b>	Selected Professional Honors and Awards	
VI.	Summary of Major Achievements	
VII.	Extension.	
	Programming Emphases	
	Fee-Based Kinesthetic Classroom Training Courses	
	In-House, On Demand Applicator Certification Manuals	
	Fee-Based Online Applicator Certification and Recertification	
	Training Courses	13
	Data Collection Program.	
	Quarterly Meetings With Regulatory Agencies	
	Evidence of Program Demand.	
	Outreach and Continuing Education—Texas CEA/Specialist Requests	
	Technology Transfer to Clientele	
	Program and Organizational Support	
	Unsolicited Comments on Educational Program Impact	
VIII.		
,	Evidence of Program Demand.	
	Teaching Summary (Classroom instruction for adult education)	
	Teaching Effectiveness and Quality	
IX.	Research	
X.	Service	
	Speaking Invitations	
XI.	Professional Development	
XII.	Grants and Contracts.	
XIII.	International Programs or Presentations	
XIV.	Publications and Professional Output.	
211 7 .	Extension Publications Authored.	
	Extension Fact Sheets Authored	
	Extension Publications Edited.	
	Peer Reviewed Journal Article.	
	Journal of Pesticide Safety Education Peer Review Board Member	
	Television Appearances	
	Television Appearances	۷۵

	Videos	. 28
	Centra Symposiums	. 30
XV.	Graduate Student Recruitment and Mentoring	
XVI.	Other Materials and Documentation	. 3

# Statement on Teaching

All of my teaching efforts are on behalf of the Texas A&M AgriLife Extension Service. Since 1995, I have taught hundreds of adult education courses for people seeking licensure with the various pesticide licensing entities in Texas. Little did I know when I began my career as an Extension professional that my previous employment experience in industry and with the Texas Department of Agriculture would so aptly prepare me for my new responsibilities.

The previous workplace professional development courses I had participated in were taught by excellent educators, who so impressed me that I integrated their teaching strategies into my style of educational program delivery. To that end, I am an educator who has invested the time to master the skills necessary to teach adults effectively. In the 429 courses I have taught over the past 2 years alone, participants have rated my courses with an average score of 27.29 (out of a maximum 30) and my speaking skills an average score of 24.73 (out of a maximum 25).

My teaching philosophies were enhanced by a greater appreciation for the insight of critical theorists' like Malcolm Knowles and David Seaman. They provided models of what adult learners need and what effective educators must do to positively affect knowledge gain. My teaching strategies are also based on research (pre- and post-tests and course/instructor evaluations) and critical reflection of the courses I conduct to determine the most effective instructional methods, teaching aids, and technologies for adults.

I believe that to be effective, adult educators must be motivated, empathetic, and knowledgeable. They must appreciate the reasons that participants have for attending a course. My course participants are all trying to improve their financial situations by obtaining the pest management skills and knowledge necessary to obtain a pesticide applicator license and to start a business or work in the industry. To ensure their success, I utilize methods (audio, visual, hands-on, and lecture) that engage all participant learning styles in my instructional efforts.

I believe effective teaching is the result of strong convictions—to the responsibility, the audience, and Extension's mission, goals, and objectives.

#### Statement on Research

I value research as a principle objective in the Land Grant University system. Realizing the importance of discovery, I utilize the principles of the research model to better affect the educational and behavioral objectives federal and state regulations mandate for the audiences I teach.

The primary purpose of my research is to improve teaching effectiveness, as measured by the knowledge and skill levels of course participants. If I am effective, course participants are better equipped to start businesses or obtain jobs.

In recent years, I have collaborated on an applied research effort using data that I routinely gather. We have analyzed the data to determine the economic impact of Extension pesticide trainings. The results contradict those who perceive that Extension education has little economic importance because we seldom use quantitative models or labor statistics to put a dollar value on our educational programs.

I strive each day to gather information and disseminate it in a manner that enhances course participant readiness and worth as pest management professionals. I constantly work with Extension faculty who conduct basic and applied research activities in pest management, commodity production (agronomy/soil science, pathology, animal science, horticulture), food safety, and public health. The objectives are to utilize these data and information to develop relevant, research-based applicator certification and recertification materials, programs, and activities.

#### Statement on Extension

Extension professionals have the responsibility and opportunity to effect positive changes in the lives of each sector in our society. Consequently, I believe that the Extension professionals' role must remain current on issues, trends, and opportunities that the public needs addressed. More importantly, it is our responsibility to be unbiased leaders who take customers as they come, help them better their situations, and inspire them to spread the word about what our organization does—helping people help themselves.

To that end, I have spent my entire Extension career developing educational programs and activities that create jobs for Texans. My position and unit help change the socioeconomic status of our clients, protect the health of people and the environment, and improve the economic conditions in our state.

#### Statement on Service

Professional development and community service are domains I focus on personally, instill in my colleagues, and actively pursue in the community.

In addition to doing my best to create and present high-quality, relevant educational programs, I make every effort to participate in on-campus activities that allow me to interface with departmental faculty and students both (undergraduate and graduate). I have been selected to serve on numerous campus and agency committees as well as to represent my discipline nationally with federal and state agencies and organizations. I also actively recruit for higher education agricultural programs and institutions (statewide and nationally).

As with the biblical statement, "to whom much is given, much is required," I believe that to whom challenges are given, positive solutions are required. I strongly believe that the opportunities to help people help themselves do not stop at 5 p.m. each day.

#### **CURRICULUM VITAE**

# Texas A&M AgriLife Extension Service The Texas A&M University System

#### I. PERSONAL INFORMATION

Name: Dr. Don LaRosa Renchie

Title: Assistant Professor, Extension Program Leader and

Specialist, and Coordinator-Pesticide Safety Education

Program (PSEP)

Departmental Unit: Agricultural and Environmental Safety Unit

Date of Initial Appointment: August 3, 1993

#### II. EDUCATION

Texas A&M University, 1998, College Station, Texas. Ph.D.

Major Area: Agricultural Education

**Dissertation:** "An Evaluation of the Effectiveness of the Pesticide Applicator

Certification Training Program of the Texas Structural Pest Control

Board"

**Major Professor:** Dr. Alvin Larke, Jr.

Prairie View A&M University, 1984, Prairie View, Texas. M.S.

Major Area: Agricultural Education

**Thesis:** "An Evaluation of the Effectiveness of the Heolithis, Zea Trapping

Program"

**Major Professor:** Dr. Nathaniel Keys

Prairie View A&M University, 1982, Prairie View, Texas. B.S.

Major Area: Animal Science (Pre-Vet)

#### III. POSITION DESCRIPTION

**Current Appointment:** Assistant Professor, Extension Program Leader and

Specialist, and Coordinator-Pesticide Safety Education

**Program** 

**Appointment:** 100% Extension

**Dates:** July 14, 2003– present

#### **Detailed Job Description:**

The Agricultural and Environmental Safety Unit is a non-departmentalized entity within the Texas A&M AgriLife Extension Service. The educational activities are strictly mandated by federal and state laws. The materials and methods used to accomplish the Unit's educational learning and behavior or practice adoptions require the use of multidisciplinary agricultural sciences (the use of entomology, plant pathology, agronomy, animal science, ecology, toxicology, ecosystem science, herbiculture, and agricultural/Extensional education).

As Extension Program Leader, provide leadership for the Pesticide Safety Education Program (PSEP), which encompasses state and federal mandated training for the certification and

recertification of 27 different categories of licensed pesticide users, as well as compliance education for all pesticide users.

Oversight and involvement includes curriculum development and delivery of training courses ranging from 4 to 20 hours in length. Coordinate development and dissemination of all training materials and utilize appropriate media (certification manuals, electronic training media such as DVDs and CDs, and web-based resources) for both entry-level technicians and experienced, certified applicators. Serve on state, regional, and national boards in the pesticide safety education and pollution prevention domains. Serve effectively on program planning committees through various service capacities.

# Program Development

Work with Extension specialists, county Extension agents (CEAs), mid-managers, administrators, and regulatory and industry personnel, to develop and review educational curricula, resources, and programs that meet regulatory requirements and customer needs for pesticide safety training.

Develop or coordinate the development of contract and grant proposals to support and expand programming.

Report program outcomes and activities for faculty achievement reports, the Texas Extension Accountability System (TExAS), the USDA plan of work, and the EPA Certification Plan and Reporting Database (CPARD). Provide input regarding adjustments in these reporting systems to better represent PSEP training.

#### Educational Programs for Clientele

Work cooperatively with Extension specialists, CEAs, and regulatory and industry personnel to disseminate educational information, conduct educational programs for pesticide users, and conduct training courses for licensed pesticide applicators.

Direct programming to support agricultural, structural/urban, and public health businesses, as well as governmental entities (including school district, city, county, state, and federal personnel), and to create new job opportunities through training for individuals to become engaged in pest management.

Sustain delivery capacity to offer several recurring in-depth annual courses. Focus on delivering hands-on experience.

Develop news articles, technical fact sheets, and educational materials to respond to public questions and emerging issues.

# Organizational and Program Support

Train Extension faculty, staff, and volunteers statewide about federal and state laws, regulations, and procedures for conducting pesticide safety education programs and activities, working to

enhance the ability of these personnel to deliver their own high quality, relevant pest management training activities.

Ensure that each Texas AgriLife representative who engages in pesticide educational programming (development of print and electronic training materials or group meetings) does so in a manner that upholds the integrity of the licensing process, avoids legal violations, and supports AgriLife Extension's strategic plan.

Contribute to Extension Foundations (new employee onboarding); utilize Centra Symposium, etc., and field inquiries from Extension personnel to enable them to provide accurate, timely customer service to the regulated communities they serve.

#### Coordination and Cooperation

Provide revenue-sharing incentives to CEAs for conducting Private Applicator certification and for supporting all pest management training programs.

Work with CEAs and their program committees, as well as regulatory and industry personnel, to identify and address new regulations and emerging issues.

Work with sister state PSEP coordinators to garner grants that benefit not only Texas, but the entire southeast United States. Pursue grants that enable maximum leveraging of state funds and provide better customer service in all programming subjects, including pollution prevention, resistance management, and public health protection.

Coordinate development of certification and recertification materials and activities with other states in EPA Region VI (Arkansas, Louisiana, New Mexico, and Oklahoma).

#### IV. PAST EXPERIENCE

**Texas A&M AgriLife Extension Service**, Agricultural and Environmental Safety Unit—College Station, Texas:

Coordinator; Pesticide Safety Education Program, 1999-2003

Appointment: 100% Extension

Responsibilities: In addition to Urban Pesticide Applicator Trainer duties, became responsible for coordinating Pesticide Safety Education Program activities at the state and federal levels. Worked cooperatively with personnel from the Texas Department of Agriculture (TDA), Structural Pest Control Board (SPCB), the Texas Department of Health (TDH), Environmental Protection Agency (EPA), American Association of Pesticide Safety Educators (AAPSE), and Southern Region PSEP Coordinators to identify pesticide safety training needs and to develop materials, programs, and activities to address those needs.

Managed the daily activities of the program and personnel. Participated in conducting performance reviews, budget preparations and legislative bill analyses.

Urban Pesticide Applicator Trainer, 1993-1999

Appointment: 100% Extension

Responsibilities: Developed and disseminated pesticide applicator training programs and activities for urban and agricultural pesticide users in Texas. Developed and established training curricula and course syllabi for various training and regulatory agencies. Conducted research and provided pesticide use data to internal and external information seekers. Formulated policies concerning pesticide use and recommendations for Extension personnel. Provided interpretations of the federal and state pesticide laws and regulations to internal and external audiences. Conducted educational training programs for homeowners, businesses, and other nontraditional pesticide users. Conducted applicator training programs for agricultural producers and structural pest control operators. Developed and disseminated news articles, radio spots and television programs relating to pesticide use. Developed and disseminated video and satellite training programs for agricultural and urban pesticide users.

## Texas Department of Agriculture, Austin, Texas:

# Pesticide Registration Program Coordinator, 1991-1993

Responsibilities: Managed the section 3 and section 7 pesticide registration programs. Supervised the program's daily operations. Coordinated the work activities of the registration staff and field inspectors. Provided guidance and instruction in the review of product labeling and associated pesticide registration documentation. Planned and implemented fiscal operating budgets. Ensured pesticide regulatory compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) by working with EPA personnel at the regional and national levels.

#### Pesticide Registration Specialist, 1990-1991

Responsibilities: Supervised the daily activities of the section 3 pesticide registration program. Coordinated pesticide registration and enforcement activities with EPA Product Managers and TDA enforcement personnel. Conducted facility inspections to ensure compliance with the FIFRA, Texas Pesticide & Herbicide laws, SARA Title III, the Texas Hazard Communication Act, Department of Transportation rules and other pertinent pesticide regulations.

# Pesticide Enforcement Coordinator, 1988-1990

Responsibilities: Reviewed and assisted in the review of pesticide use and misuse incidents from a technical expertise and a legal requirements perspective. Planned and coordinated special investigative tasks, many of which involved the registration of fraudulent pesticide manufacturers. Prepared technical reports and proposals, and conducted statistical research for the analysis of pesticide use and misuse incidents. Participated as a technical information liaison between the department, commodity producers, the general public, and university personnel. Assisted in the promulgation of rules for pesticide use, storage and disposal, containment, and applicator certification and training.

**Pesticide Territory Sales Manager**, American Cyanamid Co., Crop Protection Division–Iowa City, Iowa. 1986-1988

Responsibilities: Managed a sales territory in southeastern Iowa. Responsible for establishing new accounts, managing inventory control, establishing bulk handling facilities, setting up lines of credit, handling collections, and completing other administrative duties. Planned and coordinated sales activities with distributors, retailers, end users, and other centers of influence. Introduced the "Agri-Center" concept to the Southeastern Region of Iowa in 1987. Conducted seminars on product and regulatory updates to university and industry personnel. Coordinated and implemented product test plots with university and industry personnel, including experimental use permits (EUPs), demonstration tours, certification and recertification meetings, and trade shows. Investigated and settled customer product quality and performance complaints.

**Territory Manager**, Chevron Chemical Company, Agricultural Chemical Division–Iowa City, Iowa. 1984-1986

Responsibilities: Managed the eastern third of Iowa as a sales representative. Coordinated and implemented sales activities with distributors, retailers, and end users. Introduced the "no-till farming" concept to the Eastern Region of Iowa in 1984. Assisted area soil conservationists in organizing No-Till clubs throughout Eastern Iowa. Planned and implemented yearly sales goals and fiscal operating budgets. Coordinated with university and industry personnel. Planned and implemented product test plots, EUPs, demonstration tours, and trade shows. Investigated and settled customer product quality and performance complaints.

**Veterinary Research Technician**, International Dairy Goat Research Center, Prairie View A&M University. 1983-1984

Responsibilities: Coordinated and implemented animal health care programs for all species of livestock maintained by the University College of Agriculture. Maintained inventory and health care records, collected and reviewed data for research statistics on Caprine Arthritic Encephalitis (CAE). Participated in all phases of providing health care. Supervised undergraduate students and full time farm laborers. Participated in planning committees, conducted personnel training seminars, and supervised the daily operations of the goat and cow dairies, and the milk pasteurizing system.

**Oil field Equipment Contractor**, Roughneck Trucking/Texas Hotshot Co.—Houston, Texas. 1980-1984

Responsibilities: Owner-operator offering 24-hour transport services for oil field equipment suppliers. Supervised truck drivers who operated my equipment. Maintained financial, inventory, Department of Transportation, and equipment records. Built and maintained rapport with clients and potential clients.

#### V. SELECTED PROFESSIONAL HONORS AND AWARDS

**Cattlemen's Council Award**, for "Outstanding Contributions Texas Agriculture". Independent Cattlemen's Association of Texas, 2010.

**Service Award for Leadership in Pesticide Safety Education**, Texas Pest Control Association, 2008.

Pesticide Stewardship Program Award, US Environmental Protection Agency, 2005.

Superior Service Award, Texas A&M AgriLife Extension Service, 2005.

**Certificate of Excellence**, for youth development and leadership training efforts. Brenham Independent School District, 2004.

**EPA Certificate of Appreciation**, for co-sponsoring the National Pesticide Safety Educators Workshop. National PSEP Convention Conference. Host State Certificate of Appreciation, 2001.

#### VI. SUMMARY OF MAJOR ACHIEVEMENTS

Extension Educational Programs Conducted	986
Fee-Based, Revenue Courses and Conferences	\$ 550,540
Funding, Grants, Contracts and Gifts	\$ 1,060,567
Publication Sales (training manuals)	\$2,300,973
Member, Journal Peer Review Committees	2
Extension Publications (Pesticide Applicator Training Manuals and fact sheets), authored or edited	39
Peer-Reviewed Articles, authored	1
Dissertations and Theses reviewed	7
Minority students recruited and mentored into graduate studies - degree completed	6
Minority students recruited and mentored into graduate studies - degree pending	5

#### VII. EXTENSION

Nationally the primary roles of pest management and pesticide safety education are to develop and conduct pesticide safety education programs, and to train potential participants who become employable in the various pest management occupations via those programs. Significant

developmental work is crucial to the delivery of continuing education programs and certification training. However, because certification training is more akin to formal classroom teaching, I will describe it in the next section, under Teaching.

Job skills training has become more important as the Texas population grows. Not only do under-skilled individuals need job opportunities, but businesses need trained workers, and the economy needs new businesses. The pesticide safety educational effort not only helps individuals comply with the various federal and state regulatory agency regulations, but it also helps sustain a strong pest management industry across Texas. To that end, I have worked to develop and conduct certification courses that enhance the pest management skills (including business acumen and ethics) of the regulated community (large and small business owners).

As a pesticide safety educator, the main objectives are:

- 1. Develop current, watch relevant training materials.
- 2. Conduct training activities that enhance the skills and management capabilities of individuals engaged in pest management.
- 3. Ensure that pesticide users (urban/homeowners/Master Gardeners) and pest management professionals use these important production and public health protection tools in a manner that does not harm people, the environment, or non target organisms.
- 4. Build our unit's capacity to sustain itself despite shrinking appropriations.
- 5. Position the Texas Pesticide Safety Education Program (PSEP) as a leader in pesticide safety education nationally.

To accomplish these objectives, I have implemented the following strategies; hiring highly skilled subject matter specialists and working closely with departmental specialists to develop certification and recertification materials; conducting and participating in educational programs statewide that serve each of the audiences via group training activities, electronic training activities, and individual training activities; developing fee-based training courses in each of the top seven applicator certification categories; and seeking multi-state grants. Encourage regional training and information exchange and to strengthen our program's visibility and recognition.

I have implemented a data collection program within the Agricultural and Environmental Safety Unit to gather pre-test and post-test data on program participant knowledge gains, attitude/behavior change/adoption, course provider effectiveness, and participant demographics. These data enable our specialists to better focus their training activities on areas in which participants demonstrate a need for more effective teaching and to monitor the status of the industry.

#### **Programming Emphases**

1. Fee-Based, Kinesthetic Classroom Training Courses

Before 1995, structural pest management professionals in Texas hand no hands-on, kinesthetic training courses. They went to a pre-arranged location and viewed 8 hours of videotapes relating to pesticide safety. The exam pass rates were low, with an average of 50% or less. To address this problem, I developed the first state-approved 8-hour technician course and began training applicators statewide.

In 2005, I developed and began conducting a Structural Pest Control Service required 20-hour "Apprentice Training Course" in College Station. Data indicated that these programs were more effective in preparing individuals for their state examinations, but it also revealed their retention and skill levels were enhanced. This program has greatly improved the partipants' abilities to do their jobs, be better pest management professionals, and to adhere to pesticide use regulations.

A major benefit to our agency has been the ability of our unit to sustain itself and be recognized by the regulated community as the "state's trainers" for relevant, high-quality training opportunities.

# 2. In-House, On-Demand Applicator Certification Manuals

Before 2005, we used the Extension publication submission process to publish and distribute applicator certification manuals. Because the regulatory process is so fluid (laws and regulations change regularly), we had to address the problem of manual obsolescense to avoid federal and state regulatory compliance issues. I worked with our unit staff to develop the ability to go to departmental specialists, other state Pesticide Safety Coordinators, and the AgriLife print shop to initiate an "on demand" publication process.

As the federally mandated "sole source" for applicator certification training manuals in Texas, we have greatly enhanced the quality of the training materials per the Environmental Protection Agency. They are relevant, as to federal and state mandates, but more importantly, we have been able to improve the quality and relevance of the information taught to licensees. This change has not only increased our unit's revenue flow, but it has also enhanced the skill levels and exam pass rates of the regulated community in all licensing categories as shown in the teaching effectiveness domain of this document.

#### 3. Fee-Based Online Applicator Certification and Recertification Training Courses

In 2008, to better serve owners of large and small businesses in Texas and nationally, we developed three in-house, fee-based certification and recertification training courses to be delivered online. As travel expenses continue to rise, we have witnessed a continual increase in user activity for our courses. The impact of this adoption has been immediate, as it helps our unit by reducing travel expenses and aids the regulated community by providing business owners with more training opportunities.

# 4. Data Collection Program

Although the Texas A&M AgriLife Extension Service has an excellent data collection program, it does not gather the performance data that our porgram needs. To collect and analyze the complex data in a timely fashion, we conduct pre-tests and post-tests and gather participant demographic information at each applicator certification activity. The collection of trainee data on site has greatly enhance dour ability to modify training materials and approaches. The impact of this practice has been important, as the analysis of these data in rel time allows our unit specialists to revamp their training approaches and better help trainees to prepare for and pass their state examinations.

# 5. Quarterly Meetings with Regulatory Agencies

In 2003, I began meeting quarterly with representatives of the following agencies, that impact Texas regulations: the EPA, Texas Department of Agriculture, Texas Commission on Environmental Quality, and Texas Department of State Health Services . Federal law only required biannual meetings, but because federal and state laws and regulations are so fluid, and because Texas has the second largest population of pesticide licensees in the nation, we needed more effective and more frequent communication to help the regulated community comply with the ever-changing regulations. In addition, the lack of communication between the regulatory/licensing entities often resulted in noncompliance.

The quarterly meetings have greatly enhanced our unit's and agency's ability to facilitate applicator compliance, resulting in fewer applicator and user violations; more appreciation by the regulated community, and the Extension SALT (Senior Administration Leadership Team) for the importance of the unit's mission; and improved relationships between the federal and state entities involved in pesticide regulation.

# Evidence of Program Demand

In the pesticide safety education community, the culture focuses on multi-disciplinary group meetings and individual training activities for the regulated community. Program demand arises from various requirements for certification and periodic recertification of all applicator licensees. The 961 educational recertification activities I conducted or helped conduct and the training materials that I developed or helped develop for use by other trainers in Texas have had an economic impact of more than \$749,000,000 in pest management jobs maintained and pest management/governmental agency organizations and businesses sustained per the TDA CPARD and the Bureau of Labor Statistics job values.

#### Outreach and Continuing Education-Texas CEA/Specialist Requests

Invited Presenter, Texas CEA/Specialist-Organized Events, 1994-2012	451
---	-----

CEAs and specialists statewide routinely organize programs that award continuing education units (CEUs) for applicator recertification. I am regularly invited to participate and provide updates on federal and state pesticide laws and regulations. In addition, I teach classes on pesticide safety, integrated pest management (IPM), and other related subjects as needed.

Master Gardeners are an audience for which I often receive special requests. Nationally, urban pesticide use continues to increase at a steady rate. Accidents ranging from human exposure to environmental pollution and non-target organism fatalities were strong reasons for the Texas Master Gardener program to include an entire chapter on "Pesticide Safety." Since 1995, I have worked with CEAs statewide to teach an "Urban IPM Pesticide Safety Education Program." The 4-hour course takes participants through the federal pesticide registration process, state pesticide laws and regulations, and a section on toxicology, label comprehension, personal safety, environmental protection, and proper storage and disposal. To date, I have taught 92 Master Gardener courses in addition to the 417 presentations I have made at other CEA/specialist-organized events.

#### Technology Transfer to Clientele

Technology transfer is fundamental to pesticide safety education. Adoption of the technologies is often driven by regulatory mandate. I spend a great deal of time training program participants to utilize technological innovations related to application equipment (air flow induction nozzles, GPS for more precise or variable rate applications, tip and pour small containers, refillable versus non-refillable containers, closed loop mixing and loading systems, etc.); pesticide facilities (impermeable containment structures, proper construction to prevent theft and pollution, etc.); and protection of workers, handlers, and applicators, as well as environment (respirators, personal protective equipment and clothing; and emergency response, etc.).

The outcomes of these technology transfers are monitored by documenting regulatory actions for noncompliance, national epidemiological and medical studies, and by participant surveys administered by CEAs and specialists during or after educational programs.

I routinely disseminate these data and information to the regulated community to facilitate compliance and to mitigate environmental pollution; for example, through educational programs on the 2009 Pesticide Container and Containment Regulations and the 2011 National Pollution Discharge Elimination System permits (NPDES).

The adoption of these technologies and pest management strategies helps applicators comply with federal and state pesticide and environmental laws, produces safer food crops and livestock, and better protects public health from disease-causing organisms.

# Program and Organizational Support

To support the Extension delivery network and to facilitate applicator certification in Texas, I initiated a revenue-sharing opportunity for CEAs through the sale of Private Applicator Training manuals. Because private applicator training is one of our agency's most visible opportunities for client interface, I felt it necessary to better equip CEAs to provide quality educational activities for their program participants. Since starting in 2004, our revenue split with CEAs has totaled more than \$271,630 in direct support to county programs statewide. These funds have enabled CEAs to purchase audio-visual equipment and pay for their own agency-mandated applicator licenses.

Also, we worked cooperatively with the Texas Department of Agriculture to develop and disseminate, at no agency cost, a 4-hour private applicator certification video. This video removed the requirement for in-person, CEA-conducted private applicator training. It allows individual applicators to come to an office at their convenience and receive the state-mandated training. And it has improved customer service statewide, especially in more rural and sparsely populated counties. In addition, the in-house, on-demand publishing protocol has resulted in a return to our agency of more than \$500,000 since 2007. In summary, I have leveraged support for Extension programming via fee-based applicator certification and recertification courses, for-sale applicator manuals, and extramural grants as a PI or Co-PI totaling more than \$3,000,000.

# Unsolicited Comments on Educational Program Impact

Both the regulated and nonregulated communities provide feedback on the impact of my training courses, customer service, and commitment to improving the quality and relevance of our pesticide safety education program. It has been my primary goal to improve the public's perception of and appreciation for the importance of what our unit does. To meet that goal I have continually worked to improve my andreagogical skills and knowledge of the principles

and practices involved in pesticide use. Our customers' comments reflect the efficacy of our efforts.

"No one could have done a more superb job of presenting the important information more effectively to an audience of farmers and ranchers." January 3, 2011–Dr. Richard B. Swint, Paris Skin Cancer and Tumor Clinic, P.A.

"We at Producers Cooperative are solidly committed to complex and ever-changing pesticide safety and protocol. No doubt a very important key is continuing education for agricultural producers. Please know that Dr. Renchie went above and beyond the call of duty in his efforts to make our CEU program the very best that it could be. His time and efforts spent preparing, as well as the six hours spent leading the program for private applicators was very much appreciated by the nearly 200 participants who took part. The feedback we have received has been overwhelmingly positive. ...Don is a knowledgeable and gifted educator..." January 11, 2011–James Deatherage, Producers Cooperative Association.

"Your presentation yesterday was so meaningful and your style entertaining. I have been at TTI for 34 years this June and can truthfully say that you are at the top of the list among all the speakers that we have had since the inception of TTI Day in 1995. ...We are a close knit family at TTI and I can tell you that the place is a buzz about the excellent messages and your humorous delivery yesterday." May 5, 2011–Anna Jo Mitchell, Texas Transportation Institute.

"Renchie seizes the stage and defies the audience to turn its attention elsewhere. He often asks for the dead zone slot immediately following lunch, willingly accepting the challenge to prevent slumberous inattention." December 8, 2010–Ron Smith in Farm Press Blog.

# VIII. TEACHING

Eighty percent of my time is spent teaching adults in an Extension classroom setting. My major focus since 1995 has been certification training, the initial core training required as a licensing prerequisite. I developed the first state-approved applicator certification curriculum (which all other course providers must use).

# Evidence of Program Demand

To date, I have taught more than 368 applicator certification courses, at which more than **8,810** individuals (industry, private sector, and governmental/political subdivision employees) were trained enabling them to become eligible to take the state certification examinations and obtain jobs in the Texas pest management industry. The economic impact of those jobs is estimated at more than **\$150,000,000** to the Texas economy, families, and businesses. In addition, because our certification programs are so rigorous, most other states nationwide, as well as military and international licensing agencies, offer reciprocity for licensees who have been trained, certified, and licensed in Texas.

**Teaching Summary** (Classroom instruction for adult education)

	No. of Trainings	No. of License Candidates	Contact Hours
3-day Apprentice Certification Course, 2002-2012	40	211	4,642
1-day Technician Certification Course, 1994-2012	268	7,295	58,360
2-day <b>IPM in Schools Certification Course</b> , 1995-2012	56	871	5,226
1-day Private Applicator Certification, 2006-2012	8	375	3,000
2-day HEB Food Safety Training, 2007-2012	16	317	2,536
Totals	388	9,069	73,764

The educational programs, activities, and courses I teach are all conducted to help course participants become more gainfully employed. They range in length and duration from 4 hours of classroom instruction to 3 days of intensive hands-on instruction in 11 federally mandated subject areas. State laws and regulations stipulate that individuals who wish to become employed in "Structural Pest Control" either have 2- or 4-year degrees in the biological sciences from an accredited junior college or university. Individuals who do not meet those criteria must participate in an apprentice program that takes a minimum of 12 months to complete (average duration is 18 months).

#### 3-Day Apprentice Certification Course

The Texas Department of Agriculture licenses agricultural and structural pest management professionals. The Structural Pest Control Service (SPCS), the structural applicator licensing entity within the Department of Agriculture, requires license applicants and candidates to meet stringent educational requirements. To assist license candidates, I teach a 20-hour 3 day "Apprentice Certification Course" on a quarterly basis and by request. Participants receive mandated training in 10 specific pest management, pesticide safety, and regulatory areas. To date, I have trained more than **211** apprentices.

# 1-Day Technician Certification Course

License candidates who have satisfied the initial requirements and are qualifying to sit for the "Technician License" exam participate in a SPCS mandated 8-hour "Technician Training Course." I developed the curriculum in 1994 and have taught the class since that time, from 12 to 16 times per year. To date, I have trained more than **7,295** technician license candidates.

# 2-Day IPM in Schools Certification Course

In 1995, the Texas Legislature mandated that all Texas Public School districts have an "IPM Coordinator" to manage pest control activities on each campus and all district properties. I developed the curriculum and have the taught the 8-hour course since September 1995. In 2002, Extension Entomologists Janet Hurley and Dr. Mike Merchant began co-instructing with me. We expanded the course to a 2-day format, offered quarterly and by request, in which we provide

advanced training beyond the state-required minimum of 6 hours. To date, I have trained more than **871** IPM Coordinators and school pest management personnel.

# 1-Day Private Applicator Certification

The Texas Department of Agriculture requires all individuals who want to become licensed as Private Applicators to participate in a "Private Applicator Certification Training." In 2004, I coordinated the revision of the training to enable CEAs statewide to provide individual or group trainings. This allowed CEAs to conduct courses upon request or at scheduled events. In 2006, I began co-instructing this course at the annual "Texas A&M Beef Cattle Short Course." To date, we have certified more than 375 ranchers, allowing them to make more flexible pasture and range management decisions.

#### 2-Day HEB Food Safety Training

In 2007, after national concerns with food poisoning incidents, HEB Foods requested our agency's assistance in setting up a "Food Safety and Pesticide Residue Mitigation" course. I codeveloped an 8-hour "Pesticide Residue Mitigation" curriculum with Extension specialist Dr. Mark Matocha. We have taught the course in Texas and with Monterey Tech in Monterey, Mexico. To date, we have trained more than **317** produce suppliers.

# **Teaching Effectiveness and Quality**

I employ similar teaching strategies and techniques as my academic colleagues. The use of audio/video, computer-assisted/web-based, and hands-on training strategies have been evaulated to measure their teaching effectiveness. I utilize student performance data to make course revisions and updates. The following data summarize participant and instructor performance.

Course participant evaluation data, calendar years 2009 and 2010

N	Statistical Analysis	Pre-test-100%	Post Test– 100%	Course Ratingmax. score 30	Speaker Rating- max. score 25
175	2010	76.31	85.64	25.86	24.82
264	2009	71.09	82.23	28.72	24.64

To further strengthen my pedagogical skills, I have taught formal, campus based "intersession courses" as an adjunct faculty member in the Agricultural Leadership, Education, and Communications (ALEC) Department. In 2007, faculty from ALEC began teaching an Agricultural Science course (AGHR 4413) collaboratively with faculty from Prairie View A&M University in the College of Agriculture and Human Sciences. I have the taught the environmental protection and work place opportunities portion of the class since the collaboration began. Student course survey data indicated on a Likert rating scale, with 5 being excellent, that my score for teaching effectiveness was 4.5. I also have taught "senior seminars" in the Horticulture and the Recreation, Parks, and Tourism Departments.

To promote diversity and enhance career and educational opportunities for minority students at Texas A&M University, I am a mentor and have helped recruit 14 graduate and undergraduate students. I routinely provide admissions, degree choice, degree plan structure, and departmental assistance information to prospective bachelor's, master's, and Ph.D. students who wish to

attend the Texas A&M College of Agriculture and Life Sciences or the Prairie View A&M College of Human Sciences. In early 2011, I was approved by the Soils and Crop Sciences and ALEC departments as a "special appointment" to the committees of two Masters of Science students.

#### IX. RESEARCH

With a 100% Extension appointment, emphasis has been placed on measuring the impact/outcome of educational program delivery. Criteria include: 1) customer satisfaction, 2) knowledge gain, 3) adoption of practice and 4) economic impact.

To evaluate the effectiveness of my courses, I routinely gather performance, satisfaction, and teacher effectiveness data from participants in the 8-hour, 3-day, IPM Coordinator, and Food Safety training courses.

I focus my research efforts on analyzing data related to our unit's mission, knowledge gain, and behavior/practice adoption of program and activity participants. The resulting information is used to strengthen, correct, or modify instructional design and educational materials (manuals, instructional aids, classroom environments, and teaching strategies [audio, visual, and handson]).

In addition, demographic data is provided to the Texas Department of Agriculture, EPA, and other state or federal agencies regarding industry stability and patron use of Extension programming. The demographic data are also used to determine the customer sectors that need the most attention when conducting applicator certification activities. Over the years, these datagathering instruments and techniques have been shared with, and adopted by, many PSEP Extension colleagues throughout the United States.

Two Texas A&M AgriLife Extension Service publications have been developed electronically that summarize the outcomes by illustrating the economic impact:

Pesticide Safety Education Programs Impact Statement. (2011). Texas A&M AgriLife Extension Service - http://agecoext.tamu.edu/fileadmin/econimpact/MKT3558AL.pdf

Workforce Development in Agriculture, Agribusiness, and the Green Industry - Most Recent Quarter 2010 "Snapshot". Texas A&M AgriLife Extension Service - http://extensionanr.tamu.edu/Snapshots/Snapshot-Workforce%20Dev%20-%203rd%20Quarter.pdf

#### X. SERVICE

Memberships, Professional Committees and Boards	11
Professional Associations and Organizations	7

Because Texas has the second largest number of licensed applicators in the nation, I routinely participate on committees and boards at the regional and national levels. I have been on the

Southern Region PSEP Coordinator's Board of Directors for 6 out of the past 10 years. I served on the American Association of Pesticide Safety Educators (AAPSE) Board of Directors for 4 of the past 10 years. In 2011, I was nominated to run for president of AAPSE. The board's mission is to ensure the continuance of pesticide safety education programs throughout the United States, the Territories, and Indian Tribes. In 2005, when EPA lowered state PSEP budgets by more than 40 percent, I was successful as a board member in helping to regain EPA funding levels above the original reduction levels.

In addition, I have participated on the AAPSE Board of Editors for our *Journal of Pesticide Safety Education* since 2005. I have been an invited speaker at PSEP programs and recertification activities in Washington, D.C., Georgia, Tennessee, and Oklahoma, where I presented information on subjects such as "Food Safety IPM", "Sustaining PSEP Activities Nationally," and "Building Winning Teams." I also have worked with PSEP state coordinators and regulatory agency officials/colleagues in Indiana and Oregon to develop applicator training materials and certification manuals in subject matter ranging from "Farm Pesticide Safety" to "Demonstration and Research."

In 2004, I was given a lifetime honorary membership in the Texas Pest Control Association for my service to the pest management industry. My contributions to Texas' under-served producers have resulted in membership and leadership responsibilities in the Texas Small Farmers and Ranchers Community-Based Organization, 100 Ranchers, and the Prairie View A&M University College of Agriculture and Human Sciences Steering Committee.

Furthermore, I served on the selection committee for the TAMU Association of Former Students Distinguished Service Awards; the search or selection committee for the positions of AgriLife Extension Associate Director, Entomology Department Head, the director of the Office of the Texas State Chemist; and members of the Extension Associate Director's State Budget Planning committee.

In addition, I served on the Governor's Select Committee on Pollution Prevention; the Texas Commission on Environmental Quality Pollution Prevention Committee; and the Brazos Valley Fair and Expo Board.

I have worked to promote success among minority and poorly performing youth in our local school districts by participating on Campus Performance Improvement Committees. I also serve on my church's advisory board and established the "Brazos Valley Youth Development Committee" in 2009.

I work with the local Bryan/College Station area juvenile and adult justice systems to help individuals get back on track. I also make myself available for speaking opportunities to motivate Texans to better themselves. I believe in our Extension mission and attempt to be a positive example by working cooperatively with all sectors of our state, regardless of their beliefs or differences. I strive to be an Extension specialist who reflects professionalism and commitment to public service.

**Speaking Invitations** 

Invited or Keynote Speaker, Industry-Sponsored Events, 1993-2012	39
Invited Presenter, Organization/Association Events, 1993-2011	230
Total	269

## *Industry Requests*

Because federal and state pesticide, environmental, and food safety regulations continually evolve, I am often invited to speak at industry-sponsored programs and functions. My expertise and knowledge enable me to help the regulated community remain abreast of emerging, current, new and pending issues relating to environmental and public health protection. To date, I have been invited to participate in 24 industry-sponsored activities.

# Organization and Association Requests

Many organizations, public and private, ask me to provide professional development or continuing education for their membership at conferences, conventions, seminars, and meetings. To date, I have given presentations relating to federal and state pesticide regulations at 230 events for audiences ranging from pesticide manufacturers and distributors to trade and producer organizations and associations boards.

#### XI. PROFESSIONAL DEVELOPMENT

With the constant changes in the pesticide education and regulation industry arena, I have made a conscientious effort to participate in activities and organizations that improve my leadership, educational, and professional skills. During my professional and Extension careers, I have worked to grow personally and assume leadership responsibilities to strengthen the agricultural industry. I was selected to be in the second Texas Agricultural Lifetime Leadership class.

I regularly participate in national and state association meetings to contribute to and learn more about the issues that affect agricultural pesticide use and availability on a global basis.

Significant Professional Development Training, Workshops and Programs - 34

USDA Southern Region Pesticide Safety Education, Biloxi, MS, 2012

Certification and Training Assessment Group, San Diego, CA, 2012

USDA Southern Region Pesticide Safety Education, New Orleans, LA, 2012

Pesticide Applicator Certification and Training Workshop, Portland, OR, 2011

USDA Southern Region Pesticide Safety Education, Montgomery, AL, 2010

**EPA North American Pesticide Applicator Safety Educators Workshop**, U.S. EPA, Charleston, SC, 2010

Significant Professional Development Training, Workshops and Programs, Continued

USDA Southern Region Pesticide Safety Education, Richmond, VA, 2008

Southern Region PSEP-AAPSE Board of Directors, Senior Representative, 2007

**EPA North American Pesticide Applicator Safety Educators Workshop,** U.S. EPA, Portland, ME, 2007

USDA Southern Region Pesticide Safety Education, New Orleans, LA, 2007

**Bryan Independent School District. Increasing Student Achievement Program**, Bryan, TX, 2006

USDA Southern Region Pesticide Safety Education, Atlanta, GA, 2006

**Texas Cooperative Extension Incident Response Team Coordinator Training, College Station, TX, 2006** 

EPA required State PSEP/Regulatory Agency Quarterly Meetings (TDA, SPCB, TDSHS, and TCE), U.S. EPA, participant, 2001-present

USDA Southern Region Pesticide Safety Education, Fayetteville, AR, 2005

**EPA North American Pesticide Applicator Safety Educators Workshop,** U. S. EPA, Madison, WS, 2005

USDA Southern Region Pesticide Safety Education, Asheville, NC, 2004

USDA Southern Region Pesticide Safety Education, Oklahoma City, OK, 2003

National Pesticide Safety Education Program Workshop, U. S. EPA, Honolulu, HI, 2003

USDA Southern Region Pesticide Safety Education, Roanoke, VA, 2002

EPA Pesticide Regulatory Education Program - Structural Issues, Austin, TX, 2002

National Pesticide Safety Education Program Workshop, U. S. EPA, San Antonio, TX, 2001

USDA Southern Region Pesticide Safety Education. New Orleans, LA, 2001

EPA/State Pesticide Inspector Training, Oklahoma City, OK, 1992

**EPA/State Worker Protection Standard Train the Trainer Training,** McAllen, TX, U. S. EPA, 1992

Significant Professional Development Training, Workshops and Programs, Continued

National Pesticide Information Retrieval Services (NPIRS) Training, Savannah, GA, NPIRS, 1992

**National Pesticide Information Retrieval Services (NPIRS) Training, Orlando, FL, NPIRS.** 1990

**Certified Non-commercial Pesticide Applicator (predator management)**, Texas Department of Agriculture, Austin, TX, 1989

**Iowa State Commercial Pesticide Applicator Training Seminar**, Ames, IA, Iowa State University Extension Service, 1987

The Versatile Sales Person, Hannibal, MO, Wilson Learning, 1987

American Cyanamid Sales Training Seminar, Wayne, NJ, Cyanamid Training Staff, 1986

Agri-Growth Research Seminar, Albert Lea, MN, Agri-Growth Research, Inc., 1986

Chevron Sales Training System, Minneapolis, MN, Chevron Training Staff, 1986

PSS III Sales Training, Schulenberg, IL, Chevron Training Staff, 1985

#### XII. GRANTS AND CONTRACTS

Summary of Funding and Revenue Generated for Program and Organizational Support

GRANTS AND CONTRACTS		FEE-BASED PROGRAMS: CONFERENCES, PUBLICATION SALES, PROGRAM REGISTRATIONS	GIFTS OF EQUIPMENT
Principal Investigator	Co-investigator	Coordinator	
\$546,134	\$514,433	\$2,478,533	\$25,000
Total revenue secured for program = \$3,564,100			

#### Grants/Sales/Contracts Funded

#### FY 2010

Renchie, D., U.S. EPA./National Institute of Food and Agriculture (NIFA) Pesticide Safety Education Programs. \$44,365. External Competitive.

#### FY 2009

Renchie, D., Grodner, M., Criswell, Spradley. P, and Sutherland, C. U.S. EPA., 2009 Glyphosate Resistance Management Grant. \$66,152. External Competitive.

Renchie, D. U.S. EPA./National Institute of Food and Agriculture (NIFA) Pesticide Safety Education Programs.

\$62,183. External Competitive.

Matocha, M. and Renchie, D. USDA 2009 Southern Region IPM Center,. State Contract Grant. \$25,000. External Competitive.

# **FY 2008**

Renchie, D., Grodner, M., Criswell, Spradley. P, and Sutherland, C. U.S. EPA., 2008 Glyphosate Resistance Management Grant. \$39,680. External Competitive.

Matocha, M. and Renchie, D. Southern Region IPM Center, 2008. State Contract Grant. \$25,000. External Competitive.

Hurley, J.A., Merchant, M.E. and Renchie, D. USEPA 2008. Hosting an Integrated Pest Management Coordinator Statewide Symposium. \$50,337 External Competitive.

Renchie, D. USEPA 2006-2008. Multi-State Urban Mosquito Misting Educational Awareness Grant. \$33,381 External Competitive.

# XIII. INTERNATIONAL PROGRAMS OR PRESENTATIONS

2010	"East African Delegation"- hosted by The Borlaug Institute International Agricultural Program- I provided an overview of Federal and State PSEP and Food Safety Regulations and Procedures
2009	"Russian Delegation"- hosted by The Borlaug Institute International Agricultural Program- I provided an overview of Federal and State PSEP and Food Safety Regulations and Procedures
2008	"Monterrey, Mexico, HEB Produce Safety Training Course" - I presented a 1 day Pesticide Residue Mitigation Course to Mexican, Central and South American HEB Produce Suppliers
2004	"Russian Delegation"- hosted by The Borlaug Institute International Agricultural Program- I provided an overview of Federal and State PSEP and Food Safety Regulations and Procedures
1999	"Russian Delegation"- hosted by The Borlaug Institute International Agricultural Program- I provided an overview of Federal and State PSEP and Food Safety Regulations and Procedures
1995	"Sri Lankan Delegation"- hosted by The Borlaug Institute International Agricultural Program- I provided an overview of Federal and State PSEP and Food Safety Regulations and Procedures

#### XIV. PUBLICATIONS AND PROFESSIONAL OUTPUT

My publication activities have been driven by the Extension mission and state and federal mandates. During the past 10 years, I have focused on developing, writing, editing, and publishing certification manuals required statutorily to facilitate applicator certification and licensing in Texas, our EPA region, and nationally. The table below summarizes my activities in this domain. The manuals are for-sale publications, which further demonstrate their value to our state, our agency, and the regulated community.

Publications and Professional Output

<u> </u>	
Extension Publications Authored	18
Extension Fact Sheets Authored	8
Extension Publications Edited	10
Journal of Pesticide Safety Education Peer Review Board Member	2
Peer Reviewed Journal Article	1
Television Appearances	7
Videos	8
Centra Symposiums	12
Tota	1 66

#### Extension Publications - Authored:

Renchie, D. L., & Matocha, M. A. (2010). Pesticide residue compliance. In Anciso, J., Gregory, A. (Eds.), *Texas GAPs and GHPs Food Safety Training Curriculum* (pp. 33-35). College Station, TX.: Texas A&M AgriLife Extension Service.

**Glenn, G. J. & Renchie D. L.** (2010). *Control of Termites and Other Wood Pests*. College Station, TX.: Texas A&M AgriLife Extension Service. 105 pages.

**Renchie, D. L.** (2009). (2<sup>nd</sup> Edition). *Texas Pesticide Applicator General - Commercial, Noncommercial, Technician*. College Station, TX.: Texas A&M AgriLife Extension Service. 291 pages.

**Ketchersid, M. L., & Renchie, D. L**. (2009). (3<sup>rd</sup> Edition). *Structural and Commodity Fumigation*. College Station, TX.: Texas A&M AgriLife Extension Service. 219 pages.

**Renchie, D.** L. (2008). Soil fumigation. In Matocha, M.A. *Using Pesticides-Ornamental & Turf Pest Control* (pp. 81-95). College Station, TX.: Texas A&M AgriLife Extension Service. 97 pages.

- **Renchie, D.L**. (2008). Pasture insects. In Matocha, M.. A. & Ketchersid, M. L. *Weed and Brush Control in Pastures and Rangeland* (pp. 61-70). College Station, TX.: Texas A&M AgriLife Extension Service. 75 pages.
- **Johnsen, M. M., Glenn, G. J. & Renchie D. L**. (2008). *Using Pesticides Commercial Applicator Manual- Pest Control Category*. College Station, TX.: Texas A&M AgriLife Extension Service. 125 pages.
- **Ketchersid, M. L., & Renchie, D. L**. (2006). (2<sup>nd</sup> Edition). *Structural and Commodity Fumigation*. College Station, TX.: Texas A&M AgriLife Extension Service. 218 pages
- **Stevenson, D. E., and Renchie, D. L.** (2005). *Aerial Application of Pesticides*. College Station, TX.: Texas A&M AgriLife Extension Service. 91 pages.
- **Renchie, D. L.** (2004). (1<sup>st</sup> Edition). *Texas Pesticide Applicator General Commercial, Noncommercial, Technician*. College Station, TX.: Texas A&M AgriLife Extension Service. 216 pages.
- **Glenn, G. J. & Renchie D. L**. (2002). *Using Pesticides- Pest Control Category*. College Station, TX: Texas A&M AgriLife Extension Service. 68 pages.
- **Renchie, D. L**. (1999). (1<sup>st</sup> Edition) *Using Pesticides Private Applicator Manual*. College Station, TX.: Texas A&M AgriLife Extension Service. 84 pages.
- **Supak, J. R., Lemon, R. G., Renchie, D. L. & Conthren, T**. (1999). (3<sup>rd</sup> Edition). *Cotton Harvest Aid Recommendations for Central Texas*. College Station, TX.: Texas Agricultural Extension Service. 8 pages.
- **Ketchersid, M. L., & Renchie, D. L**. (1999). (1<sup>st</sup> Edition). *Structural and Commodity Fumigation*. College Station, TX.: Texas A&M AgriLife Extension Service. 170 pages.
- **Renchie, D. L.** (1997). An Evaluation Of The Effectiveness Of The Pesticide Applicator Certification Training Program Of The Texas Structural Pest Control Board. (Doctoral dissertation, Texas A&M University). Retrieved from proquest.umi.com
- **Supak, J. R., Lemon, R. G., Renchie, D. L., & Conthren, T**. (1997). (2<sup>nd</sup> Edition). *Cotton Harvest Aid Recommendations for Central Texas*. College Station, TX.: Texas Agricultural Extension Service. 8 pages.
- **Supak, J. R., Lemon, R. G., Renchie, D. L., & Conthren, T.** (1996). (1<sup>st</sup> Edition). *Cotton Harvest Aid Recommendations for Central Texas*. College Station, TX.: Texas Agricultural Extension Service. 8 pages.

#### Extension Fact Sheets - Authored:

- **Renchie, D.** L. and Matocha, M.A. (2012). What You Need to Know about the Texas Pesticides General Permit TXG870000: Private Applicator. College Station, TX.: Texas A&M AgriLife Extension Service.
- **Renchie, D.** L. and Matocha, M.A. (2012). What You Need to Know about the Texas Pesticides General Permit TXG870000: Homeowner. College Station, TX.: Texas A&M AgriLife Extension Service.
- **Renchie, D. L. and Matocha, M.A.** (2012). What You Need to Know about the Texas Pesticides General Permit TXG870000: Commercial/Non-Commercial Applicators. College Station, TX.: Texas A&M AgriLife Extension Service.
- **Johnsen, M. and Renchie, D. L**. (2007). *Mosquito Life Cycle*. College Station, TX.: Texas A&M AgriLife Extension Service.
- Grodner, M., Criswell, J., Sutherland, C., Spradley, P., Renchie, D. L., Merchant, M., Johnsen, M, and Sawlis, S. (2007). The Best Way to Control Mosquitoes, Integrated Mosquito Management Explained. College Station, TX.: Texas A&M AgriLife Extension Service.
- Grodner, M., Criswell, J., Sutherland, C., Spradley, P., Renchie, D. L., Merchant, M., Johnsen, M., and Sawlis, S. (2007). Avoiding the Super Mosquito, What you need to know about insecticide resistance in mosquitoes. College Station, TX.: Texas A&M AgriLife Extension Service.
- Johnsen, M., Renchie, D. L, Olson, J. K., Grodner, M., Criswell, J., Sutherland, C., Spradley, P., and Merchant, M. (2007). *Residential Mosquito Control and Beneficial Insect*. College Station, TX.: Texas A&M AgriLife Extension Service.
- **Renchie, D. L**. (2011). (2<sup>nd</sup> Edition). *Storing Pesticides Safely*. College Station, TX: Texas A&M AgriLife Extension Service.

#### Extension Publications - Edited:

- **Renchie, D. L**. (Ed.) (2010). *Public Health Related Pest Control*. College Station, TX.: Texas A&M AgriLife Extension Service. 150 pages.
- **Renchie, D. L**. (Ed.) (2009). (2<sup>nd</sup> Edition). *Pesticide Application on Field Crops*. College Station, TX.: Texas A&M AgriLife Extension Service. 125 pages.
- **Renchie, D.** L. (Ed.) (2008). (2<sup>nd</sup> Edition). *Using Pesticides Private Applicator Manual*. College Station, TX.: Texas A&M AgriLife Extension Service. 85 pages.
- **Renchie, D. L.** (Ed.) (2008). (2<sup>nd</sup> Edition). *Using Pesticides-Ornamental and Turf Plant Pest Control*. College Station, TX.: Texas A&M AgriLife Extension Service. 97 pages.

#### Extension Publications - Edited, Continued:

**Renchie, D.** L. (Ed.). (2008). *Weed and Brush Control in Pastures and Rangeland*. College Station, TX.: Texas A&M AgriLife Extension Service. 75 pages.

**Renchie, D.** L. (Ed.) (2005). *Pest Control in Fruit, Nuts, and Vegetables*. College Station, TX.: Texas A&M AgriLife Extension Service. 104 pages.

**Renchie, Don L**. (Ed.) (2004). (2<sup>nd</sup> Edition). *Public Health Related Pest Control*. College Station, TX.: Texas A&M AgriLife Extension Service. 129 pages.

**Renchie, Don L**. (Ed.) (2004). *Using Pesticides Right-of-Way Pest Control*. College Station, TX.: Texas A&M AgriLife Extension Service. 96 pages.

**Renchie, D.** L. (Ed.) (2003). (1<sup>st</sup> Edition). *Pesticide Application on Field Crops*. College Station, TX.: Texas A&M AgriLife Extension Service. 84 pages.

**Renchie, D.** L. (Ed.) (2002). (1<sup>st</sup> Edition). *Using Pesticides-Ornamental and Turf Plant Pest Control*. College Station, TX.: Texas A&M AgriLife Extension Service. 76 pages.

**Renchie, D. L.** (Ed.) (2002). (1<sup>st</sup> Edition). *Public Health Related Pest Control*. College Station, TX.: Texas A&M AgriLife Extension Service. 127 pages.

#### Peer Reviewed Journal Article:

**Renchie, D., Larke, A., & Jones, W. A.** (2004) "Effectiveness of a SPAT Educational Program". Journal of Extension, {Online} (42) 6. Available at <a href="http://www.joe.org/joe/2004december/rb8.shtml">http://www.joe.org/joe/2004december/rb8.shtml</a>.

#### Journal of Pesticide Safety Education Peer Review Committee Member:

**Renchie, D. L.** (2009). *Professional Continuing Education for Commercial Pesticide Applicators: A Case Study in Standard Setting* [Peer commentary on the article "Professional Continuing Education for Commercial Pesticide Applicators: A Case Study in Standard Setting" by A. Martin, L. Reed, F. Whitford, and J. Becovity]. *Journal of Pesticide Safety Education Vol.* 11. Pages 1-10.

**Renchie, D. L.** (2006). *Educational Needs Assessment for IPM in Multi-Family and Community Dwelling* [Peer commentary on the article "Educational Needs Assessment for IPM in Multi-Family and Community Dwelling" by C. A. Ramsey, R. L. Hines, D. A. Suomi, and S. K. McDonald]. *Journal of Pesticide Safety Education Vol.* 8. Pages 10-16.

#### **Television Appearances:**

**Renchie, D.**, (2012). KBTX.

**Renchie, D.**, (2011). KBTX.

# Television Appearances, Continued:

Renchie, D., (2009). Producers Cooperative and KBTX, "From the Ground Up"

Renchie, D., (2007). Producers Cooperative and KBTX, "From the Ground Up"

Renchie, D., (2003). KBTX, "From the Ground Up"

Renchie, D., (1995). KBTX

Renchie, D., (1994). KBTX

Videos:

**Renchie, D.** (2011). Aerial Application – The Human Factor. Contributor. 1 hour.

**Renchie**, **D**. (2009). Drift Minimization – Aerial Application. Contributor. 1 hour.

Renchie, D. (2005). Katy ISD, IPM in Schools Video. Co-Producer. 6 hours.

**Renchie, D.** (2005). Texas Department of Agriculture Private Applicator Training Video. Co-Producer. 3 hours.

**Renchie**, **D**. (2002). Law Enforcement T.V. Pesticide Facility Security. Contributor. 25 minutes

Renchie, D. (1995). IPM In Schools Video. Contributor. 4 hours.

Renchie, D. (1993). Structural Pest Control Satellite Conference. Contributor. 6 hours

Renchie, D. (1993). Nursing Home Pest Management. Co-Producer. 1 hour.

#### Centra Symposiums:

**Renchie, D.** (2010). Laws and Regulations Update. 1 hour.

Renchie, D. (2006). Demonstration and Research Centra. 3 hours.

**Renchie, D.** (2005-2012). Professional Development Programs, New and Experience County Extension Agents. 2 hours each.

#### XV. GRADUATE STUDENTS RECRUITED AND MENTORED

#### Doctoral:

Nobles, Carolyn (2000, Completed). Doctor of Philosophy

Daniels, Nelson (2005, Completed). Doctor of Philosophy

Harris, Danielle (2006, Completed). Doctor of Philosophy

Malone, Allen (2009, Completed). Doctor of Philosophy

Faucett, Azure (2012, Completed). Doctor of Philosophy

Miller, Hurley (In Progress). Doctor of Philosophy

# Masters, Thesis Option:

Duncan, Justin (In Progress). Master of Science.

Simoneaux, Bryan (In Progress). Master of Science.

Thibodeaux, Tamara (In Progress). Master of Science.

# Graduate Committees as a Special Appointment:

Jacob Brown, MS - Agricultural Leadership, Education, and Communications, Texas A&M University (Completed 2012)

Desiree Rucker, PHD - Agricultural Leadership, Education, and Communications, Texas A&M University (In progress)

Student Name:Student UIN:	Graduat	te Student Evaluation	•	e: Chair/Co-C	hair or M	Aember
Dept and Major:	"Programmatic"		Above	Charks Meets	Below	'. Not
How well does the student meet your ex	pectations in the following	areas?	Expectations	Expectations	Expectations	Observable
	Exhibits a coherent understan	nding of discipline-specific knowledge?		A GEORGE		
Applies discipline-specific knov	ledge in a range of contexts to	o solve problems and make decisions?				
Uses a variety of sources and eva	luates multiple points of view	to analyze and integrate information?				,
	Utilizes information to cond	uct critical, well-reasoned arguments?				
WriHen, C	Iral, + Vishal	<b>?</b> Communicates effectively?				
	Explains or teaches	the subject matter in their discipline?				
Exhibits profici	ency in technology appropriate	e to solve problems in their discipline?				
The following additional questions should be						
How well does the student meet your ex	pectations in the following	areas?	Above Expectations	Meets Expectations	Below Expectations	Not Observable
		Develops clear research plans?				
Co	onducts valid, data-supported	and theoretically consistent research?				
belong at top?	Chooses ethical cour	ses of action in research and practice?				
	Effectively disseminates res	earch results in appropriate contexts?				

DRAFT DOCUMENT

**College of Agriculture and Life Sciences** 

September 2012

Additional Comments (Optional):

PREV	NEW		NEW	
SCORE	SCORE Q	<b>QUANTITATIVE %</b>	SCORE V	<b>VERBAL</b> %
800	166	94	170	99
790	164	91	170	99
780	163	88	170	99
770 760	161 160	86 84	170 170	99 99
750	159	82	169	99
740	158	79	169	99
730	157	77	168	98
720	156	74	168	98
710	155	69	167	98
700	155	69	166	97
690 680	154 153	67 65	165 165	96 96
670	152	61	164	94
660	152	61	164	94
650	151	56	163	93
640	151	56	162	90
630	150	53	162	90
620	149	49	161	89
610	149	49	160	86
600	148	44	160	86
590	148	44	159	84
580	147	40	158	79
570	147	40	158	79
560	146	36	157	77
550	146	36	156	72
540 530	145 145	32 32	156 155	72 69
520	143	26	154	64
510	144	26	154	64
500	144	26	153	62
490	143	22	152	56
480	143	22	152	56
470	142	19	151	51
460	142	19	151	51
450	141	16	150	48
440	141	16	149	42
430 420	141 140	16 12	149 148	42 40
410	140	12	148	36
400	140	12	146	31
390	139	10	146	31
380	139	10	145	28
370	138	7	144	26
360	138	7	143	21
350	138	7	143	21
340	137	6	142	18
330	137 136	6	141 140	16 13
320 310	136	4	139	10
300	136	4	138	8
290	135	3	137	6
280	135	3	135	4
270	134	2	134	3
260	134	2	133	2
250	133	1	132	1
240	133	1	131	1
230	132	1	130	1
220 210	132 131	1	130	1
210	131	1 1	130 130	1 1
200	131	1	130	1

SCORE	WRITING %
6.0	98
5.5	92
5.0	81
4.5	63
4.0	41
3.5	23
3.0	10
2.5	3
2.0	1
1.5	1
1.0	1
0.5	0
0.0	0

# **ALEC Criterion Score Calculation**

(GRE-V %ile + GRE-Q %ile + GRE-W %ile) + (GPR x 100)

Master's Minimum to be considered: 350

Doctoral Minimum to be considered: 400

#### **Old Test Auto Admit Minimums**

# **Master's Applicants**

GRE-Q	GRE-V	Writing	Last 60 hrs. GPR
500	410	4	3.1

# **Doctoral Applicants**

GRE-Q	GRE-V	Writing	Graduate GPR
500	450	4	3.7

# **New Test - Auto Admit Minimums**

# **Master's Applicants**

GRE-Q	GRE-V	Writing	Last 60 hrs. GPR
26%	36%	41%	3.1
144	147	4	

# **Doctoral Applicants**

GRE-Q	GRE-V	Writing	Graduate GPR
26%	48%	41%	3.7
144	150	4	

If your scores and GPA meet each category above for the degree of interest, you may be admitted automatically without a faculty vote. However, you must still have a faculty member to agree to serve as your interim major advisor.

# Grad Course Sequencing Department of Agricultural Leadership, Education, & Communications

o = odd years; e = even years

Fall Course and T	Title Title	Steward
ALEC 602 (o, e)	Advanced Instructional Design in Agricultural Science	Harlin
ALEC 605 (o, e)	Facilitating Complete Secondary Agricultural Science Programs	Rayfield
ALEC 606 (o, e)	Leadership Education Theory	Elbert
ALEC 610 (o, e)	Principles of Adult Education (Web-based)	Lindner
ALEC 611 (o, e)	Advanced Methods in Distance Education (Web-based)	Dooley
ALEC 615 (o, e)	Philosophy of Agricultural Education (Web-Enhanced)	Murphy
ALEC 616 (o, e)	Facilitation of Leadership Programs	Moore?
ALEC 618 (o, e)	(Proposed course) Cross Cultural Perspectives on Leadership	Elbert
ALEC 621 (o)	Methods of Online Survey Research in Agricultural Science	Wingenbach
ALEC 623 (o, e)	Survey of Evaluation Strategies for Agriculture (Web-based)	Murphrey
ALEC 624 (o, e)	Developing Funded Research Projects (Doctoral only)	Pina
ALEC 640 (o, e)	Methods of Technological Change (Web-based)	Murphrey
<b>ALEC 644 (0, e)</b>	The Agricultural Advisor in Developing Nations	Pina
<b>ALEC 646 (e)</b>	Institutions Serving Agriculture in Developing Nations	Wingenbach
ALEC 681 (o, e)	Seminar (topics change by semester; can be taken more than once)	
<b>ALEC 690 (0, e)</b>	Theory of Agricultural Education Research (Basic Quant)	Briers
ALEC 691 (o, e)	Research for MS/PhD	
ALEC 692 (o, e)	Research for EdD	
ALEC 693 (o, e)	Professional Study for MAg	
ALEC 695 (o, e)	Frontiers in Research (Campus & Web-based)	??

<b>Spring Course and</b>	Title	Steward
ALEC 601 (o, e)	Advanced Methods in Agricultural Education	Murphy
ALEC 602 (o, e)	Advanced Instructional Design in Agricultural Science	Harlin
ALEC 604 (o, e)	Writing for Professional Publication	Rutherford
ALEC 605 (o, e)	Facilitating Complete Secondary Agricultural Science Programs	Rayfield
<b>ALEC 607 (e)</b>	Youth Leadership Programs (Web-based)	Boyd
ALEC 608 (o, e)	Leadership of Volunteers	Lockett
ALEC 609 (o, e)	Learning Organizations	Moore
ALEC 612 (o, e)	Advanced Instructional Design for Online Learning (Web-based)	Murphrey
ALEC 613 (o, e)	Techniques in eLearning Development & Delivery (Web-based)	Strong
ALEC 620 (o, e)	Instrumentation and Survey Research Methods	Lindner
ALEC 622 (o, e)	Data Collection, Analysis and Interpretation	Briers
ALEC 624 (o, e)	Developing Funded Research Projects (Masters only)	Pina
ALEC 625 (o, e)	Program Evaluation & Organizational Accountability (Web-based)	Elbert
ALEC 630 (o, e)	Guidance and Counseling for Rural Youth	Larke
ALEC 640 (o, e)	Methods of Technological Change	Murphrey
ALEC 645 (o)	Initiating, Managing & Monitoring Projects of International ADEV	Pina
ALEC 646 (e)	Institutions Serving Agriculture in Developing Nations	
ALEC 652 (o)	Images of Agriculture: Visual Communication Research	Rutherford

ALEC 681 (o, e)	Seminar (topics change by semester; can be taken more than one	ce)
<b>ALEC 691 (o, e)</b>	Research for MS/PhD	
<b>ALEC 692 (o, e)</b>	Research for EdD	
ALEC 693 (o, e)	Professional Study for MAg	
ALEC 695 (o, e)	Frontiers of Research	
ALEC 696 (o, e)	Qualitative Research Methods (Campus & Web-based)	Dooley

Summer Course ar	nd Title	Steward
ALEC 603 (o, e)	Experiential Learning	Rayfield
ALEC 617 (o, e)	Leadership in Organizational Culture & Ethics	Williams
<b>ALEC 625 (e)</b>	Program Evaluation & Organizational Accountability (Web-based)	Elbert
ALEC 631 (o, e)	Development and Planning of Community Education Programs	Cummings
ALEC 646 (o)	Institutions Serving Agriculture in Developing Nations	Wingenbach

This document is intended for planning purposes. Course offerings are subject to change and it is recommended that students visit with their advisors and course instructors to determine exact offerings for specific semesters.

Last Updated, January 2013

	2012-13	2013-14	2014-15	2015-16	2016-17
	ALEC 602 Adv Instructional Design in AGSC (Harlin)	ALEC 602 Adv Instructional Design in AGSC (Harlin)	ALEC 602 Adv Instructional Design in AGSC	ALEC 602 Adv Instructional Design in AGSC	ALEC 602 Adv Instructional Design in AGSC
	ALEC 605 Facilitating Comp Secondary AGSC Programs (Rayfield)	ALEC 605 Facilitating Comp Secondary AGSC Programs (Rayfield)	ALEC 605 Facilitating Comp Secondary AGSC Programs	ALEC 605 Facilitating Comp Secondary AGSC Programs	ALEC 605 Facilitating Comp Secondary AGSC Programs
	ALEC 606 Leadership Education Theory (Elbert)	ALEC 606 Leadership Education Theory	ALEC 606 Leadership Education Theory	ALEC 606 Leadership Education Theory	ALEC 606 Leadership Education Theory
	ALEC 610 Principles of Adult Education	ALEC 610 Principles of Adult Education (Lindner) <sup>1</sup>	ALEC 610 Principles of Adult Education	ALEC 610 Principles of Adult Education	ALEC 610 Principles of Adult Education
	(Lindner) 13	ALEC 611 Adv Methods in Distance Ed <sup>1</sup>	ALEC 611 Adv Methods in Distance Ed <sup>1</sup>	ALEC 611 Adv Methods in Distance Ed <sup>1</sup>	ALEC 611 Adv Methods in Distance Ed <sup>1</sup>
	ALEC 611 Adv Methods in Distance Ed (Dooley) <sup>1</sup>	ALEC 615 Philosophy of AGED  (Murphy) 1	ALEC 615 Philosophy of AGED <sup>2</sup>	ALEC 615 Philosophy of AGED <sup>1</sup>	ALEC 615 Philosophy of AGED <sup>2</sup>
	ALEC 615 Philosophy of AGED (Murphy) <sup>2</sup>	ALEC 621 Methods of Online Survey	ALEC 623 Survey of Evaluation Strategies for Agriculture	ALEC 621 Methods of Online Survey Research in AGSC	ALEC 623 Survey of Evaluation Strategies for Agriculture
	ALEC 616 Facilitation of Leadership Programs (Odom)	Research in AGSC (Wingenbach)  ALEC 623 Survey of Evaluation	ALEC 624 Developing Funded Research Projects	ALEC 623 Survey of Evaluation Strategies for Agriculture <sup>1</sup>	ALEC 624 Developing Funded Research Projects
	ALEC 623 Survey of Evaluation Strategies for Agriculture (Murphrey)	Strategies for Agriculture (Murphrey) <sup>1</sup>	ALEC 640 Methods of Technological Change <sup>1</sup>	ALEC 624 Developing Funded Research Projects	ALEC 640 Methods of Technological Change <sup>1</sup>
FALL	ALEC 623 Survey of Evaluation Strategies for Agriculture (Murphrey) <sup>1</sup>	ALEC 624 Developing Funded Research Projects (Pina)	ALEC 644 The Agricultural Advisor in  Developing Nations	ALEC 640 Methods of Technological Change <sup>1</sup>	ALEC 644 The Agricultural Advisor in  Developing Nations
	ALEC 624 Developing Funded Research Projects-Doctoral only (Pina)  ALEC 640 Methods of Technological	ALEC 640 Methods of Technological Change (Murphrey) <sup>1</sup>	ALEC 646 Institutions Serving AG in Developing Nations	ALEC 644 The Agricultural Advisor in Developing Nations	ALEC 646 Institutions Serving AG in Developing Nations
	Change (Murphrey) <sup>1</sup>	ALEC 644 The Agricultural Advisor in Developing Nations (STAFF)	ALEC 681 Seminar	ALEC 681 Seminar	ALEC 681 Seminar
	ALEC 640 Methods of Technological Change (Strong)	ALEC 681 Seminar (STAFF)	ALEC 690 Theory of AGED Research- Basic Quant	ALEC 690 Theory of AGED Research- Basic Quant	ALEC 690 Theory of AGED Research- Basic Quant
	ALEC 644 The Agricultural Advisor in Developing Nations (Pina)	ALEC 690 Theory of AGED Research- Basic Quant (Briers)	ALEC 695 Frontiers in Research	ALEC 695 Frontiers in Research	ALEC 695 Frontiers in Research
	ALEC 681 Seminar (Murphy)- Theoretical Frameworks	ALEC 695 Frontiers in Research			
	ALEC 681 Seminar (Murphrey)	ALEC 695 Frontiers in Research <sup>1</sup>			
	ALEC 681 Seminar (Strong) 13				
	ALEC 690 Theory of AGED Research-Basic Quant (Briers)				
	ALEC 695 Frontiers of Research (Rayfield)				
	ALEC 695 Frontiers of Research (Strong) 1				

	2012-13	2013-14	2014-15	2015-16	2016-17
Spring Winter Mini-mester	ALEC 640 Methods of Technological Change (Strong, Harlin) <sup>5</sup> – Costa Rica				
SS 1 / Summer Mini-mester	ALEC 625 Program Evaluation &	ALEC 603 Experiential Learning  ALEC 617 Leadership in Organizational Culture & Ethics  ALEC 625 Program Evaluation & Organizational Accountability <sup>1</sup> ALEC 631 Development and Planning of Community Education Programs	ALEC 603 Experiential Learning  ALEC 617 Leadership in Organizational Culture & Ethics  ALEC 631 Development and Planning of Community Education Programs  ALEC 646 Institutions Serving AG in Developing Nations	ALEC 603 Experiential Learning  ALEC 617 Leadership in Organizational Culture & Ethics  ALEC 625 Program Evaluation & Organizational Accountability <sup>1</sup> ALEC 631 Development and Planning of Community Education Programs	ALEC 603 Experiential Learning  ALEC 617 Leadership in Organizational Culture & Ethics  ALEC 631 Development and Planning of Community Education Programs  ALEC 646 Institutions Serving AG in Developing Nations
SS =					

- 1 Distance delivery as web-based
- 2 Delivery is web enhanced
- 3 For Joint Ed.D. program
- 4 Summer Mini-mester
- 5 Study Abroad

Updated December 2012