

## Southwest Texas Junior College Wildlife Management Unit Action Plan for 2013 - 2014

Start Date: 9/1/2013 End Date: 5/1/2014

**Unit Purpose:** The Wildlife Management program will provide proven principles and skills, which will enable students to practice the science of wildlife management. The program will enable students to acquire the capability to become assistant Wildlife Biologists, Park Managers, Game Refuge Managers, Hunting Preserve Managers, Private Land (Ranch) Hunting Operators, Eco Tourism Managers and Wildlife Photographers. The Wildlife Management program offers a one-year Certificate and an Associate of Applied Science (A.A.S.) degree.

Submitted By  Yes  
Robert Zaiglin

Reviewed By  Yes  
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Approved By  Yes  
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Closeout Ready  Yes  
Robert Zaiglin

Closeout Completed  Yes  
Connie Buchanan

### Planning Outcome No. 1 Wildlife Management Year: 2013-2014

**Expected Outcome:** Students will improve learning related to the Wildlife Management program outcome 'Demonstrate the ability to identify native vegetation important to specific wildlife populations'.

**Outcome Rationale:** Assessments indicate that improvement is needed in this program outcome.

**Intervention:** Students will be introduced to the various brush species on weekly field trips to local ranches. This year students will also be provided a vegetative ID book (produced by both students and faculty) for use as an instructional supplement in the field and in the classroom.

**Mission Link:** Accessible, affordable, high-quality education

**Institutional Goal Link:** Learning-Centered Environment

**Strategic Goal Link:** NA

**Planning Type:** Student Learning

**Program Link:** Wildlife Management

**Program Outcome Link:** Demonstrate the ability to identify native vegetation important to specific wildlife populations.

Tracking Data:	2009-2010	2010-2011	2011-2012	2012-2013	Base	Trend	Latest	Target
	NA	35%	59%	31%	%		31%	0%

**Other Links:** Instructional Program or Service Unit Review  
An intervention designed to improve a student learning or success.

**Assessment Method:** Students will be required to identify required brush species (80 types) by visual identification in the field. Eighty percent of the students are expected to identify 80% of the species. Correctly identifying 80 percent species is mastery.

**Assessment Measures:**

Measure	Beginning	Target	Ending
Demonstrate the ability to identify native vegetation important to specific wildlife populations.	31%	0%	92%

**Start-End Date:** 09/01/2013 - 05/01/2014

**Budget:**

Personnel:	\$	0	for
Equipment:	\$	0	for
Other:	\$	0	for
<b>Total Cost:</b>	<b>\$</b>	<b>0</b>	<b>Unit's Budget \$0 Other Funding Source \$0</b>

**Findings:** A total of 24 students were tested. Twenty two students (92%) correctly identified 80% of the plants.

**Actions Taken/Changes:** No change is recommended to be made at this time. Will continue next year.

Outcome achieved:  Yes

Outcome Resulted in Improved Student Learning:  Yes

Outcome Resulted in Improved Student Success:

Person Responsible: Robert Zaiglin

Date: 2/11/2015

Planning Outcome No. 2 Unit: Wildlife Management Year: 2013-2014

**Expected Outcome:** Students will improve learning related to the Wildlife Management program outcome 'Apply GPS and GIS technologies in the development of a wildlife management plan'.  
**Outcome:** Assessments indicate that improvement is needed in this program outcome.  
**Rationale:**  
**Intervention:** Beginning earlier in the semester, students in GISC 1302 will be required to practice hands-on practical applications of the GPS unit and use of ArcMap. Increase number of repetitions of creation and editing of shapes from approximately 8 to 10.

Mission Link: Enter the job market

Institutional Goal Link: Learning

Strategic Goal Link: NA

Planning Type: Student Learning

Program Link: Wildlife Management

Program Outcome Link: Apply GPS and GIS technologies in the development of a wildlife management plan.

Tracking Data:	2009-2010	2010-2011	2011-2012	2012-2013	Base	Trend	Latest	Target
	70%	50%	38%	100%	%		100%	0%

Course Outcome Link: GISC1302 1. Obtain data using a handheld GPS unit.

Course Outcome Link: GISC1302 2. Create shapefiles using GIS software.

Course Outcome Link: GISC1302 3. Download basemaps into GIS software.

Course Outcome Link: GISC1302 4. Create property maps including title and legend.

Course Outcome Link: GISC1302 5. Format map for export.

**Assessment Method:** The following skills will be assessed in GISC-1302 toward the end of the semester. Faculty will observe students performing the task and will rate each skill on a scale of 1 to 10. Mastery is considered 8 pts of individual skills and an overall score of 40 points. 1. GPS data acquisition 2. Downloading base map. 3. Creating GPS shapefiles and placing onto base map. 4. Adding title, legend, etc. to map 6. Saving map in file format needed for export.

Assessment Measures:

Measure	Beginning	Target	Ending
Apply GPS and GIS technologies in the development of a wildlife management plan.	0%	80%	64%
GISC1302 1. Obtain data using a handheld GPS unit.	54%	50%	73%
GISC1302 2. Create GPS shapefile and load into GIS software.	23%	50%	50%
GISC1302 3. Download basemaps into GIS software.	69%	50%	73%
GISC1302 4. Create property maps including title and legend.	58%	50%	50%
GISC1302 5. Format map for export.	69%	50%	83%

Start-End Date: 09/01/2013 - 05/01/2014

Budget:

Personnel:	\$	0 for
Equipment:	\$	0 for
Other:	\$	0 for
<b>Total Cost:</b>	<b>\$</b>	<b>0</b> <b>Unit's Budget \$0</b> <b>Other Funding Source \$0</b>

**Findings:** A total of 22 students were evaluated with 64% of students retaining 80% of all steps in the map making process by the end of the semester. Students were found to be more proficient in formatting maps for export (84%), downloading of basemaps into GIS software (73%), acquiring GPS data (73%), than creating shapefiles using GPS data (50%), and designing maps (50%). Because of scheduling issues students were assessed after having a week off of practicing the GIS tasks. This was observed to be a possible reason for lower retention by some students.

**Actions Taken/Changes:** Particular steps where students are having problems with retention within each GIS task have been identified, and will be addressed by breaking down problem areas and repeating the process until there is adequate retention of those steps. Additional assignments, utilizing the GIS handbook, and focusing on these particular problems areas should help with retention of these particular steps. Additional tasks will be added to the GIS handbook pertaining to the 'Introduction to

Raster Based GIS' class. Students taking the second GIS class 'Introduction to Raster Based GIS' will receive additional practice in the basic GIS tasks listed in the 'Findings' section.

Outcome achieved:  Yes

Outcome Resulted in Improved Student Learning:  Yes

Outcome Resulted in Improved Student Success:  No

Person Responsible: Robert Zaiglin

Date: 2/11/2015

Planning Outcome No. 3 Unit: Wildlife Management Year: 2013-2014

**Expected Outcome:** Graduating students in AGRI 2370 will be able to write a wildlife management plan pertaining to an actual designated ranch.

**Outcome Rationale:** Potential employers expect graduates to be able to write site specific wildlife mgt plans from real world experience.

**Intervention:** The importance, relevance, design, development, and implementation of a management plan is discussed throughout the course in class and in the field. Discussions with land owners and other professionals is incorporated in these class activities.

Mission Link: Enter the job market

Institutional Goal Link: Learning

Strategic Goal Link: NA

Planning Type: Student Learning

Program Link: Wildlife Management

Program Outcome Link: Write a wildlife management plan.

Tracking Data:	2009-2010	2010-2011	2011-2012	2012-2013	Base	Trend	Latest	Target
	92%	87%	21%	95%	%		95%	0%

**Assessment Method:** All graduating students will be required to develop a management plan on a preselected wildlife oriented ranch during their final semester. Mastery is 80%. Assessments will be based on presentation(20Pt's.) structure(20 pts), content(20 Pt's),creativity(20 Pt's)and grammar(20 Pt's).The department goal is for 80% of students to successfully write a wildlife management plan.

Assessment Measures:

Measure	Beginning	Target	Ending
Write a wildlife management plan.	95%	0%	100%

Start-End Date: 09/01/2013 - 05/01/2014

Budget:

Personnel:	\$	0	for
Equipment:	\$	0	for
Other:	\$	0	for
<b>Total Cost:</b>	<b>\$</b>	<b>0</b>	<b>Unit's Budget \$0 Other Funding Source \$0</b>

**Findings:** Twelve (92%) of 13 students completed a management plan of those completeing a plan, 6 students (50%) scored >= 80%. However, 12(100%)scored >=70%. Overall grammar and creativity and content lagged behind the plan structure in most student plans. Twelve students (100%) mastered the presentation aspect. 12 students (100%) mastered the structure aspect. Four students (33%) mastered the content aspect. Four students (33%) mastered the creativity aspect. Three students (25%) mastered the grammar aspect.

**Actions Taken/Changes:** Students will continue to be encouraged to attend the writing help center while additional writing assignments will be assigned in wildlife classes.

Outcome achieved:  Yes

Outcome Resulted in Improved Student Learning:  Yes

Outcome Resulted in Improved Student Success:  No

Person Responsible: Bob Zaiglin

Date: 2/11/2015