Institutional Goal 2: Ensure Program Excellence
Institutional Goal 3: Improve Student Success

Department Name: Turfgrass Management Technology

Mission/Purpose: The purpose of the Turfgrass Management Technology program is to prepare individuals to apply technical skills in recreational grasses and related turf fields.

Degrees, Diplomas, and Certificates Offered: Associate Degree in Turfgrass Management, Certificate in Turfgrass Management

Describe how the program's mission aligns with the College's vision, mission, core values, and strategic goals. The Turfgrass Management program complements the college mission and goals by contributing to employment opportunity for graduates all over the United States. The program prepares students for further education and helps students develop skills necessary for the ever-changing diverse workforce. Through consultation with the Advisory Committee, program instruction incorporates current community tends and needs while maintaining the true focus on the student. Program graduates enhance the quality of life in the community. Expected outcomes include a well-versed student who will be a top candidate for job placement.

Activities to ensure curriculum currency (2015-16; 2016-17; 2017-18)
List program curriculum changes, revisions, deletions in table.

Course Title	Date – Updated / Revised / Deleted
CIS 110 (Intro to Computers)	Fall 2017 Deleted
GCM 110 (Golf Course Shop Management)	Summer 2018 Deleted
GCM 220 (Golf Course Maintenance)	Sumer 2018 Added

Provide an overview of the significance of the program changes and improvements that occurred over the past three years
Course revisions and a course deletion, as indicated in Fall 2017 and Summer 2018.

Advisory Committee: dates, summary of minutes, activities (2015-16; 2016-17; 2017-18)

Summary of Advisory Committee Activities

Year	Meeting Dates	Recommendations / Activities
2015-16	9/18, 3/17	Add Spanish class
2016-17	12/1, 6/15	Irrigation Project for softball field / Completed in 2017
2017-18	9/21 ,6/22	Recommended an addition of ultra-dwarf Bermuda grass green.

Describe program's participation with Advisory Committee or external organizations that contribute to maintaining program relevance. *(File Advisory Committee Meeting Minutes for past three years in Program Review Attachment folder.)*
Committee recommends having a designated area for turfgrass classes. They also recommended addition of ultra-dwarf Bermuda grass green.

Analysis of trends in the field or industry *(Are there jobs available for your students? Is there new technology/equipment that needs to be added to your program?)*
All graduates to the best of my knowledge are employed within a year of graduating. The job outlook in South Eastern United states is high. Attachments will be asked for current turfgrass equipment in the turfgrass program.

Faculty Profile

List of Faculty and Status (2015-16; 2016-17; 2017-18)

Faculty / Name	Full-Time / Part-Time
Robert Woods	Full Time

Have all the faculty credentials been verified? (*Verify required documents are in personnel files.*)
Credentials have been verified Janet Sumner and Christine Tyson.

Faculty Contact and Credit Hours

Faculty / Name	Full-Time Part-Time	Summer 2015		Fall 2015		Spring 2016	
		Contact	Credit	Contact	Credit	Contact	Credit
Robert Woods	Full-Time	9	10	21	15	20	14
Lab Assistant – Chris Hartley						3	

Faculty / Name	Full-Time Part-Time	Summer 2016		Fall 2016		Spring 2017	
		Contact	Credit	Contact	Credit	Contact	Credit
Robert Woods	Full-time	9	10	21	15	20	16
Lab Assistant – Chris Hartley						3	

Faculty / Name	Full-Time Part-Time	Summer 2017		Fall 2017		Spring 2018	
		Contact	Credit	Contact	Credit	Contact	Credit
Robert Woods	Full-time	9	10	21	17	20	14
Lab Assistant – Chris Hartley						3	

Faculty Demographics (2015-16; 2016-17; 2017-18)

	# Employees	Avg. Years of Service	% of Classes Taught By
Full-Time	1	14	100
Part-Time			

The Applied Turfgrass Management faculty includes one full-time faculty member. This number is adequate and all Turfgrass Management courses are developed by the full-time instructor.

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Professional development activities of faculty (2015-16; 2016-17; 2017-18)
Professional development tracking logs are completed and filed in Program Review Professional Development folder.

Student Demographics

Gender (A15420) *Unduplicated*			
Academic Year	Female	Male	Total
2015-2016	0	23	23
2016-2017	1	23	24
2017-2018	0	27	27

Gender (C15420) *Unduplicated*			
Academic Year	Female	Male	Total
2015-2016	0	2	2
2016-2017	0	2	2
2017-2018	0	0	0

Ethnicity (A15420) *Unduplicated*							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	0	2	0	0	21	0	23
2016-2017	0	2	0	1	21	0	24
2017-2018	0	1	0	1	25	0	27

Ethnicity (C15420) *Unduplicated*							
Academic Year	American Indian	African American	Asian or Pacific Islander	Hispanic	Caucasian	Other / Unknown / Multiple	Total
2015-2016	0	0	0	0	2	0	2
2016-2017	0	0	0	0	2	0	2
2017-2018	0	0	0	0	0	0	0

Age Groups (A15420) *Unduplicated*						
Academic Year	Under 18	18-24 years	25-34 years	35-44 years	45 and older	Total
2015-2016	0	12	6	3	2	23
2016-2017	0	13	6	2	3	24
2017-2018	0	13	7	4	3	27

Age Groups (C15420) *Unduplicated*						
Academic Year	Under 18	18-24 years	25-34 years	35-44 years	45 and older	Total
2015-2016	0	1	1	0	0	2
2016-2017	0	2	0	0	0	2

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2017-2018	0	0	0	0	0	0

The majority of students in the Turfgrass science program are males (97%). This number has remained constant over the last three years. According to demographics within the turfgrass sector that percentage is close to the number of females in the work place. Opportunities exist in the African-American and Hispanic communities to capitalize on these opportunities; we are developing relationships with employers that offer tuition assistance for employees wanting to further their education for advancement.

Program Enrollment (Fall, Spring, Summer)

Program Enrollment (A15420) *Unduplicated*		
Year	Enrollment	3-Year Average
2015-16	23	31
2016-17	24	27
2017-18	27	25

Program Enrollment (C15420) *Unduplicated*		
Year	Enrollment	3-Year Average
2015-16	2	1
2016-17	2	1
2017-18	0	1

Enrollment has not fluctuated very much every year with a high of 31 students in 2015-16. We have remained pretty consistent the last three years.

Program Review and Outcome Assessment, 2018-19

Program Outcomes

Retention

Baseline: 64% (*Average of last three years – 2014-15; 2015-16; 2016-17; fall to fall program retention*)
**Standard:**   71%
Target: 75%

Data/Results:

Fall-to-Fall

Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	New Program	Institutional Retention
2014-2015	29	8	12	8	69.0%	1	72.4%
2015-2016	22	3	10	9	59.1%	0	59.1%
2016-2017	20	1	12	6	65.0%	1	70.0%
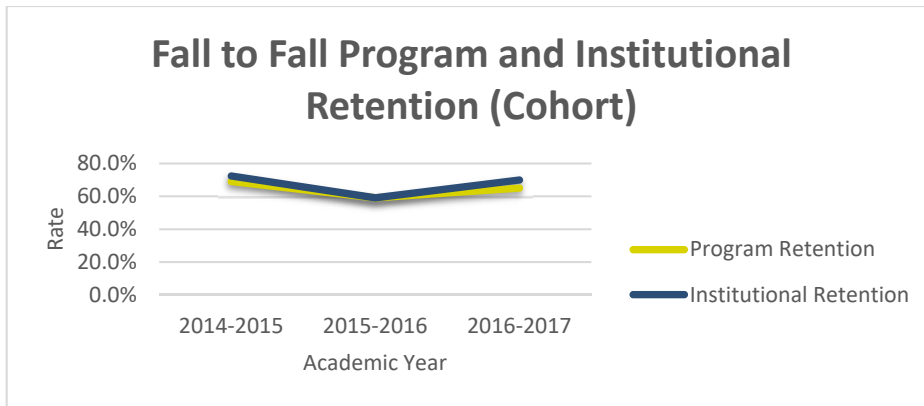
Fall-to-Spring

Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	New Program	Institutional Retention
2015-2016	22	0	18	3	81.8%	1	86.4%
2016-2017	20	1	15	3	80.0%	1	85.0%
2017-2018	21	0	15	6	71.4%	0	71.4%

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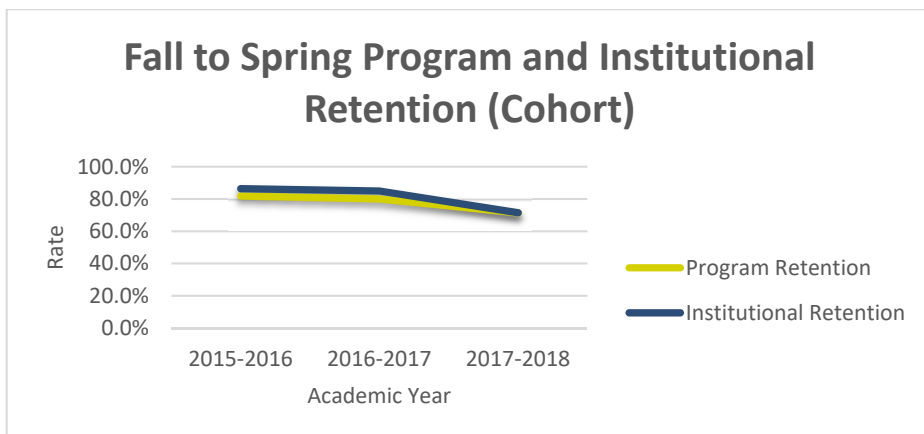
Provide narrative for analysis of program retention. *(Based on the data, provide a narrative of your analysis of <u>fall to fall</u> retention. Indicate factors that may have affected your retention. State any changes you plan to ad dress for next year that may affect / increase your retention.)*

Fall to Spring Retention rate dropped some from previous years. This can be attributed to students needing to work full-time and personal matters. I will continue to be in contact with students to work towards completion of the program.

Provide narrative for analysis of standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

New program retention standard and target was set based on the three-year baseline data from 2014-15, 2015-16, and 2016-17 fall to fall retention.

Completions

Baseline: 7 (*Average of last three years – 2015-16; 2016-17; 2017-18*)
Standard: 8
Target: 9

Data/Results:

Number of Graduates (Completions) *Unduplicated*				
	Degree	**Diploma**	**Certificate**	**Total**
2015-16	4		3	7
2016-17	2		4	6
2017-18	7		0	7

Provide narrative for analysis of completions. *(Are you satisfied with your completion rates? How might you increase your completion rates?*

I will encourage students to finish degrees. In the past students have gotten jobs before graduating and dropped out of school because of being overwhelmed .

Provide narrative for analysis of standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

New completion standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

Job Placement / Employment *(to be provided by program)*

Baseline: 98% (*Average number employed for the last three years – 2015-16; 2016-17; 2017-18*)
Standard: 99%
Target: 100%

Data/Results:

Employment Demand						
Year	Graduates	# Employed (within 1 Yr)	# Seeking More Education (within 1 Yr)	% Employed & Seeking More Education	Unknown	Other/Comments
2015-16	7	4	5	129%		
2016-17	6	2	2	67%		
2017-18	7	5	2	100%		

Provide narrative for analysis of job placement rates. *(Are students finding jobs within the program of study?)* *(How can your program promote higher employment of students in the field?)*
All the students that have graduated in the past three years have jobs if they so desire. I have had graduates that have no desire to work and are at retirement age they took the program for enhancement of their own property.

Provide narrative for analysis of standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*
New employment demand standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

Labor Market Data

Provide narrative for analysis of Labor Market Data. *(Review Labor Market Data provided and provide an assessment of the data.)*
No license is required. Labor market data indicates 521 jobs were available in the workforce for 2018 in the occupations related to turfgrass fields. This occupations indicates a 5.2% increase over the next four years. The average salary range is $10.30 per hour.

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Licensure and Certification Passing Rates (if applicable)

Baseline: XX% (*Average of last three years; identify last three licensure years*)
Standard: XX%
Target: XX%

Data/Results: Not applicable for the Turfgrass Management Technology program.

Licensure / Certification Exam – Title

Year	# Tested	% Passing
2010-11		
2012-13		
2013-14		
2014-15		
2015-16		
2016-17		

Provide narrative for analysis of licensure / certification passing rates. *(Are you satisfied with your program licensure rates?)*
Not applicable.

Provide narrative for analysis of standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*
Not applicable.

Third-Party Credentials (if applicable)

Baseline: XX# (*Average number of completers for the last three years – 2015-16; 2016-17; 2017-18*)
Standard: XX#
Target: XX#

Data/Results: Not applicable for the Turfgrass Management Technology program.

Third-Party Credentials

Year	Credentials for Program of Study	# Tested	# Completers
2015-16			
2016-17			
2017-18			

Provide narrative for analysis of third-party credentials. *(Are there other industry-recognized credentials that needs to be addressed for the program of study?) (What are other means to promote program third-party credentials?)*
Not applicable.

Provide narrative for analysis of standard/target. *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target?*
Not applicable.

Program Review and Outcome Assessment, 2018-19

Course Success

Analysis of student success in courses (2015-16; 2016-17; 2017-18)
Provide narrative for analysis of student success in courses. *(Ex – Are more students successful in online courses versus traditional? Are students more successful in certain courses?)*

Student success data indicates that the percent of success is in line with traditional course instruction. As indicated in the table below, students were successful in both introduction courses, TRF 110 and TRF 210.

Analysis of student success in distance learning courses (2015-16; 2016-17; 2017-18)

Course Success Rates by Method of Instruction				
Semester	Department	Course Number	% Success	Method of Instruction
Fall 2015	Agriculture	TRF-110	75%	Hybrid
Fall 2016	Agriculture	TRF-110	90%	Hybrid
Fall 2017	Agriculture	TRF-110	100%	Hybrid
Fall 2015	Agriculture	TRF-210	78%	Traditional
Fall 2016	Agriculture	TRF-210	89%	Traditional
Fall 2017	Agriculture	TRF-210	100%	Traditional

Provide narrative for analysis of student success in distance learning courses. *(Are distance education course success rates equivalent to the success rates for other methods of instruction?)*
It doesn't appear that there is any difference in hybrid verses traditional class as far as student success.

Analysis of Program Learning Outcomes (PLO) (2015-16; 2016-17; 2017-18)
- Document PLO cycle for the next four years (2018-19, 2019-20, 2020-21, and 2021-22) in the table below.
- File program learning outcome reports for the past three years (2015-16, 2016-17, and 2017-18) in the Program Review Attachment folder.
- Document changes to the program learning outcomes and/or assessment cycle.
  - The program intends to reduce the number of program learning outcomes from six to three. Two outcomes will be combined in one statement and two outcomes will be deleted.

Assessment Cycle	Program Learning Outcomes
2018-19	PLO #5 – Operate and maintain turfgrass management equipment. (collected Fall 2018; assessed in Spring 2019)
2019-20	NEW PLO #1 (combining original #1 and #2 outcomes) ADD new statement emailed
2020-21	PLO # 2 - Complete functional design for a turfgrass irrigation system. (Collect? / Assess?)
2021-22	PLO # 3 - Operate and maintain turfgrass management equipment. (Collect? / Assess?)

Other Assessments

Analysis of graduate survey data (2015-16; 2016-17; 2017-18)
Provide narrative for analysis of program-specific graduate survey data. *(What did you learn from the results? What did your graduates indicate needed to be revised within your program?)*
Overall graduates have indicated satisfaction with student services departments. Graduates are finding employment within their field of study. A few graduates have no desire for employment, they obtained the education for their self-interest.

Analysis of employer survey data (2015-16; 2016-17; 2017-18)
Provide narrative for analysis of program-specific employer survey data. *(What did employers indicate needs improvement within your program (equipment, facilities, program offerings/certificates?)*
According to the employer survey cross tab, those that completed the survey were satisfied with the Applied Turfgrass Mangement program. However, the need for dedicated lab space and/or classroom space with facilities to maintain turfgrass management equipment on campus is needed.

External Reviews

In addition to SACSCOC, is there an accrediting body specifically related to the program? If so, please name the professional organization, describe the program's current status, and most recent date of accreditation.
Not applicable

Resources

Program facilities - location and adequacy
Provide narrative for program facilities adequacy and/or needs.
Turfgrass Management program is housed in a different class room for every class. The Agriculture and Natural Resources Department are mainly housed in the Magnolia building, but turfgrass management classes are in the spruce and magnolia building and are changed almost every semester. The need to have a dedicated area with enough room to work on equipment would be a great addition to the turfgrass management program.

Library resources
Provide narrative for program library resources. *(Are library resources adequate for your program?)*
No additional resources are required from the Library. All resources are sufficient to meet the requirements for the program.

Planning Objectives (2015-16; 2016-17; 2017-18)
- Verify previous year's prioritized planning objectives end-of-year status reports are filed in Program Review Planning Objective EOY (End of Year) Status Reports folder.
- Provide a summary of planning objectives submitted for the last three years, including the use of results, of the planning objectives in the table provided.

Summary of Planning Objectives

Planning Year	Objective(s) Submitted	Use of Results
2015-16	1) 15 passenger van (Agriculture & Natural Resource department use)	1) Submitted at mid-year, not funded, will resubmit in 2016-17.

	2) 6" deep well with pump	2) Submitted at mid-year, not funded, will resubmit in 2016-17.
2016-17	1) 15 passenger van (Agriculture & Natural Resource department use) 2) 6" deep well with pump	1) Objective funded by county; the new van is placed in travel rotation. 2) Well was installed and have plans to connect it to the current irrigation.
2017-18	No objectives were submitted	N/A

Overall analysis of the strengths of the program
Provide narrative for analysis of the strengths of the program.
The Turfgrass Management classes are taught hybrid with exception of the summer semester. This allows students to work part- time while they are attending school. The summer semester classes are online to allow student to work a 32 hour work base learning experience. The turfgrass management covers a wide area of career opportunities ranging from golf courses, athletic fields, and lawn care. This allows them to be more marketable in the workplace. Each semester students have a wide array of job opportunities in the turfgrass field there are more jobs than students.

Overall analysis of the weaknesses of the program
Provide narrative for analysis of the weaknesses of the program.
Lack of classroom space. The need for more space to accommodate equipment repair. Reaching students that have no idea what career opportunities out there. I know there is a lot of people that would enjoy a career outdoors that just need to know about the turfgrass management program. I have some recruiting strategies that I hope will pay off for fall of 2019.

Recommendations
- Complete 2018-2019 Program/Service Review/Outcome Assessment Recommendation Worksheet to address action items from program review and outcome analysis with target date; and methods to assess action items.
- File Review/Outcome and Assessment Recommendation Worksheet in Recommendation and Follow-Up folder.
- Recommendation follow-up reports to be addressed spring semester following review year (2019-20 and 2020-21).

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Recommendations from Program Review and Outcome Assessments
Name of Program: Turfgrass Management Technology

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2018-2019 Program Review and Outcome Assessments Recommendations
(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)

Outcome *(Identify projected outcomes as a result of your program/service review.)*	**Target Date** *(Identify your projected target date for completion of action items.)*	**Actions/strategies to achieve outcomes and how you will assess the action/strategy**
Retention – Fall to Fall Baseline = 64% Standard = 71% Target = 75%	Fall 2021	Continue to use Aviso to identify students who may be at risk. Continue to actively advise students for course selections and registration.
Completions – Baseline = 7 Standard = 8 Target = 9	Fall 2021	Continue to encourage student to become completers if that is not an option I will steer them towards the

Program Review and Outcome Assessment, 2018-19

		certificate instead of leaving with no degree.
Job Placement – Baseline = 98% Standard = 99% Target = 100%	Fall 2021	Continue to work with industry contacts, employers, HR representatives and advisory committee members to assist students in finding jobs.
Licensure/Certification Passing Rates (if applicable) - Not applicable.	NA	NA
Third-Party Credentials (if applicable) – Not applicable.	NA	NA
Additional Recommendation – Revise program learning outcomes	Spring 2019	Highlighted is the new PLO's 1) Develop turfgrass maintenance plans and provide recommendations regarding nutrients and weed control (NEW- combined PLO #1 & 2; now becomes PLO #1) 1) Develop both establishment and maintenance plans for high quality turfgrass areas (original) 2) Make recommendations regarding nutrient management of soil and methods of weed control (original) 3) Complete functional design for a turfgrass irrigation system. (assessed in 2017-18; becomes PLO#2) 4) Demonstrate the ability to perform calculations needed in the Turfgrass field. (delete) 5) Operate and maintain turfgrass management equipment. (assess in 2018-19; becomes PLO #3) 6) Turfgrass program and use for integrated pest management. (delete)

Approvals
- Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review the Program/Service Review and Outcome Assessments when completed by the responsible program/service personnel. The Office of Institutional Effectiveness will forward the review documents to the appropriate administrator upon completion.
- Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to review and approve the Service Review and Outcome Assessment and Recommendations as submitted.

DocuSigned by:

IE Acceptance / Date: _Dorothy Moore_   5/7/2020
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DocuSigned by:

Administrator Approval / Date: _Patty Pfeiffer_   5/7/2020
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