

**2021-2022**  
***Nutrition & Food Science***  
***EVALUATION GUIDE FOR INDUSTRY***  
***CERTIFICATION***

*A Partnership between-*



*And*

**Georgia Department of Education**  
**Career, Technical & Agricultural Education Division**



**And**



**Working together to recognize EXEMPLARY**  
**Nutrition & Food Science Programs**  
**preparing students to be College & Career Ready**

# PROCEDURES FOR SEEKING NUTRITION & FOOD SCIENCE INDUSTRY CERTIFICATION

## 1. CERTIFICATION INQUIRIES

Contact should be made with the NFS Foundation Director - Evaluation Team Leader (ETL) indicating interest in applying for Nutrition and Food Science (NFS) Industry Certification. Refer to the Nutrition & Food Science Standards on the GaDOE (Georgia Department of Education) website for further information.

## 2. CERTIFICATION INFORMATION

- a. Schools with an existing Nutrition and Food Science program that has been in existence for three consecutive years can pursue Nutrition and Food Science Industry Certification.
- b. All teachers are required to pass a content knowledge test. The school will be invoiced \$100 each time the test is administered by the GaNFS Director. Grant money can be used towards this expense. More information regarding the test can be found below in 3b.
- c. The school is responsible for the team members cost and reimbursement for travel. The grant money can be used to cover these expenses of approximately \$1,200 to \$1,500 total.
- d. The high school program will be evaluated using the standards included in this packet, and this material may be compiled in folders/crates for easy review.
- e. In the Fall, prior to going through industry certification, the high school teacher should attend an industry certification professional learning workshop covering the Nutrition and Food Science Industry Certification procedures and expectations, standards, evaluation tools, and the Site Review.

## 3. INSTRUCTION FOR SELF-ASSESSMENT AND PREPARATION FOR THE NFS CONTENT KNOWLEDGE TEST

The self-assessment is a process whereby the program compares itself to the standards. The process includes a review of the standards by the local school's self-assessment team which should ensure the school will be ready for the Industry Certification site visit by the Nutrition & Food Science evaluation team. The following steps are recommended:

- a. Review the standards and criteria for the high school program classroom. See Appendix A.
- b. Read NFS content material, study for, apply and pass the Nutrition and Food Science Knowledge Test, a pre-requisite for the Site Visit Application. Questions on the test will cover each standard of the three courses in the pathway. A passing score is 70 of 100 possible points on this test consisting of 100 objective questions (mostly multiple choice and true-false). The test will be administered at the GATFACS Winter Conference in January. The test may be taken twice. After the second try, there is a required six-month study period prior to the third attempt. A study guide for the test can be found on the [www.ganfs.org](http://www.ganfs.org) website.
- c. Form a local self-assessment certification team using school administrators, faculty members, advisory committee members, and business/industry members from the community or use a sub-set of your advisory committee as the self-assessment team. The goal is to solicit help from individuals with expertise in Nutrition and Food Science.
- d. Generate detailed documentation for each standard in the order in which they appear. Under each criterion provide documentation (pictures, emails, lesson plans with supporting student work, flyers, student portfolios, forms, etc.) and recommend improvements that still need to be made. **Describing what you have done or giving examples does not**

**count as evidence. Pictures, student work, budgets, displays, etc. are acceptable documentation of evidence. Three years (a history) of documentation is required.** Early collecting of evidence is suggested to document each Standard. Some teachers begin with a file folder labeled for each of the nine standards to collect evidence prior to compiling the folders that will be examined during the site visit. Folders or electronic compilations are acceptable for review.

- e. Set realistic time schedules for completion of the program self-assessment and for group sessions to summarize team members' findings/documentation and their recommendations for improvement. Keep in mind deadlines: apply for grants in Spring prior to going through industry certification, set date early in year for Site Review, spend grant money, schedule onsite visit, allow for Nutrition and Food Science Review Team, and closure of grant ending June 30<sup>th</sup>.
- f. The team can use the evaluation form to document self-assessment ratings, identify and make recommendations for criteria needing additional work.
- g. Adjustments or corrections to the program, after the self-evaluation, should be completed prior to the formal Site Review by the Nutrition & Food Science Review Team.
- h. After all reviews and observations are completed and improvements made, the local self-assessment team should compile the folders for the Site Visit by the Nutrition & Food Science Review Team.

#### **4. SCHEDULING SITE REVIEW**

During the Fall Industry Certification Training, the GaNFS Director will work with NFS Teachers to determine a date for the Pre-Visit and the GaNFS Team Visit. Pre-Visits should be scheduled in the Fall. Site visits should be scheduled prior to April 1st

- a. During the Pre-Visit, the NFS Teacher should have at least one piece of documentation for each standard. The GaNFS Director will review the documentation to provide feedback and guidance for the Team Visit.
- b. The Georgia Nutrition & Food Science Review Team may consist of Nutrition & Food Science business and industry individuals, NFS Board Members, university or technical college faculty, or others with expertise in nutrition and food science.

#### **5. REVIEW AND RECOMMENDATION FOR CERTIFICATION**

The Nutrition & Food Science Industry Certification Site Review Team will spend approximately one day reviewing the program in terms of the Nutrition & Food Science Industry Standards.

- a. The NFS Review Team will review the high school/program documentation, observe and visit the facilities, and interview the teacher, high school students and advisory committee members.
- b. The NFS Review Team will use the same standards as set forth in Appendix A.
- c. The Review Team will discuss general findings in an exit interview with the high school teacher and/or any administrators that would like to attend. **The final recommendations, ratings and detailed findings of the team; however, will not be discussed during the exit interview.**
- d. The findings of the Review Team will be forwarded to the Nutrition & Food Science ETL for processing based on the recommendation of the Review Team.
- e. On the basis of the review ratings, the team's recommendation and final review by the Nutrition & Food Science ETL, the program will be awarded either certification, conditional certification pending further documentation or

denial of certification. The decision will be accompanied by written identification of the areas needing improvement and an explanation of what improvements are needed to earn certification, if applicable.

- f. Recognition will be awarded to those programs meeting the Nutrition & Food Science Industry Certification Standards by the GADOE at the Winter GATFACS Conference or at the GACTE Summer Conference.

**6. MINIMUM STANDARD REQUIRED**

- a. The Industry Certification Instructional Program must include at least 180 hours of classroom and/or laboratory instruction per the state recommended curriculum guide.
- b. All Nutrition & Food Science **Standards I-IX** must be met. If for some reason the standard is not met, there will be an opportunity to correct and/or resubmit evidence for further review. Any review items must be resubmitted by a **date determined** by NFS Foundation Director of the year in which the review takes place.

**7. Annual Reports and Recertification**

- a. An Annual Report Form should be completed each year by May 1<sup>st</sup> and sent to NFS Foundation Director - ETL.
- b. Major changes in the program (e.g., hiring a high school teacher who does not meet the required qualifications, the elimination of the lab/project-based setting) may require additional follow-up. Each new high school teacher hired will be required to pass the Nutrition & Food Science Knowledge Test that is part of the preparatory work for industry certification.
- c. GaDOE requires a recertification every 5 years for all certified programs and requires the same Site Visit procedures as the initial certification – review of the high school program by the Nutrition & Food Science Review Team.
- d. Annual report document can be found at [www.ganfs.org](http://www.ganfs.org).

**8. CONTACT INFORMATION FOR THE Nutrition & Food Science Foundation**

- a. NFS Foundation Director - Evaluation Team Leader (ETL)  
Charlotte Joy  
j165mc@aol.com

# Appendix A

## Nutrition & Food Science Industry Certification Standards and Criteria

The following are the Nutrition and Food Science (NFS) Industry Certification Standards and Criteria for the high school program classroom. Every program pursuing industry certification will be evaluated on these standards and criteria. **Three years of documentation (a history) is required.**

### I. Curriculum & Instruction

Standard Statement: Instruction  
 Instruction must be systematic and reflect the program goals. Specific performance standards will ensure that students will meet their education goals in the Nutrition & Food Science Program. The instructional program must reflect the principles of sound instruction for a career and technical education program.

	Performance Standards	Review of Documentation	Comments
1.	The program is using the GaDOE curriculum and a scope and sequence is provided for each course indicating the Georgia Standards of Excellence/Lecture Hours/Lab Hours. (3 years) Project-Based Lab Hours Required: FNW (20-25 hrs); FFL (25-30 hrs.; FS (30-35 hrs) *Food, Nutrition, & Wellness (FNW) *Food for Life (FFL) *Food Science (FS)	<input type="checkbox"/> YES  <input type="checkbox"/> NO	
2.	Courses are designed so that students can complete all the requirements for a career pathway in NFS within 3 years. The ideal is to offer NFS in the following order: 1. Food, Nutrition, and Wellness (FNW) 2. Food for Life (FFL) 3. Food Science (FS)	<input type="checkbox"/> YES  <input type="checkbox"/> NO	

3.	The Nutrition & Food Science program has a documented roster of students completing each pathway course, showing end of course grade. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
4.	Document that the program courses have an average of 20 students in each class, and this pathway comprises a majority of the courses the instructor teaches. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
5.	<p>A minimum of three lesson plans from the Food, Nutrition, and Wellness course to adequately reflect standards. Plans are supported with examples of assessed student work relating to the lesson plans.</p> <p>In all instances throughout the Standards, lesson plans should be original or if CTAERN, etc. plans are used, they should be modified to address local student needs.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
6.	<p>A minimum of three lesson plans from the Food for Life course to adequately reflect standards. Plans are supported with examples of assessed student work relating to the lesson plans.</p> <p>In all instances throughout the Standards, lesson plans should be original or if CTAERN, etc. plans are used, they should be modified to address local student needs.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
7.	<p>A minimum of three lesson plans from the Food Science course to adequately reflect specific science standards. Plans are supported with examples of assessed student work relating to the lesson plans.</p> <p>In all instances throughout the Standards, lesson plans should be original or if CTAERN, etc. plans are used, they should be modified to address local student needs.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

8.	A minimum of three teacher created lesson plans that focus on career awareness and employability skills are being taught in the Nutrition & Food Science curriculum. Each plan is supported by the evidence of assessed student work.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
9.	The most up-to-date course syllabus is provided for each course. The document includes course descriptions, objectives of course, career opportunities, FCCLA information, and applicable end-of-pathway assessment(s).	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
10.	<p>Student team presents collaborative project to the on-site team describing the project and the specific skills and knowledge acquired.</p> <p>Presentation needs to include description, objectives, alignment to GPS, rubric for assessment and demonstration --- all related to the collaborative project.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
11.	<p>High school students are given the opportunity to explore current events, trends, history, and technology in the Nutrition &amp; Food Science Industry. (3 years)</p> <p>Documentation should be student work relating to a lesson plan which may be news articles, business periodicals, online websites, portfolios, labeled pictures, and, etc.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
12.	An annual community service project should take place with a focus on nutrition and/or wellness. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

13.	Local resource people/stakeholders speak and work with high school students about professions/issues relating to nutrition and food science. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
14.	The high school teacher's daily schedule provides adequate time for: (3 years) <ul style="list-style-type: none"> <li>• Planning and course development.</li> <li>• Student organization activities.</li> </ul>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
15.	Individual, differentiated materials/activities/projects are used to accommodate needs of high school students as outlined in IEPs and/or 504s. (ex. Alternate materials, modified instructional strategies, modified plans, etc.) (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
16.	Evidence indicates the instructor is aware of different learning styles and utilizes them in the instruction. (3 years)  The high school teacher provides instruction using different modalities including lecturing, demonstration, simulation etc.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
17.	The instructor utilizes a variety of curriculum materials and activities to encourage the acceptance of diversity as it relates to gender, age, language, ability, race, religion, family structure, background or culture. No evidence of bias was found in materials, displays, lesson plan, etc. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	



18.	<p>Students have mastered proficiencies in the pathway. Provide the Administrator's list of students who took the End of Pathway Assessment and their scores for the past three years:</p> <ul style="list-style-type: none"> <li>- AAFCS Food Science</li> <li>- AAFCS Nutrition/Wellness</li> <li>- ServSafe Handler</li> <li>- ServSafe Manager</li> </ul>	<input type="checkbox"/> <b>YES</b>  <input type="checkbox"/> <b>NO</b>	
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## II. Equipment & Facilities

**Standard Statement:**  
Equipment used in the training program must be of the type and quality found to provide training to meet the program goals and performance objectives. The facilities must be appropriate for the variety of learning and training activities which occur in the Nutrition and Food Science classroom/lab setting and must meet business and industry standards.

19.	<p>The Nutrition and Food Science classroom/lab are equipped with updated and functional equipment/chemicals per the equipment/chemical inventory listed in Appendix B, C, &amp; D. Use the appendixes as a part of the documentation.</p>	<input type="checkbox"/> <b>YES</b>  <input type="checkbox"/> <b>NO</b>	
20.	<p>A teacher developed long range equipment replacement/purchase plan is available. Identify which major pieces of equipment need to be replaced/purchased within five years. Provide dates of when the equipment was purchased. Example of a form can be found on the GaDOE-CTAE website or <a href="http://www.ganfs.org">www.ganfs.org</a>.</p>	<input type="checkbox"/> <b>YES</b>  <input type="checkbox"/> <b>NO</b>	
21.	<p>Consumable supply funds have been spent on quality instructional materials for the last 3 years.</p>	<input type="checkbox"/> <b>YES</b>  <input type="checkbox"/> <b>NO</b>	

22.	Industry certification funds were spent according to the guidelines.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
23.	Students are trained in the proper use of laboratory equipment as part of ongoing instruction. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
24.	Adequate storage area is available to support activities outlined in the program goals.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
25.	The storage area is used for the intended purposes.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
26.	A locked storage area is used for the intended purposes.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
27.	The layout of the NFS lab is suitable for large/small group, team and individual student work.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
28.	The classroom has lab space that is barrier free to accommodate students with disabilities.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

29.	The classroom is clean, orderly and reflective of an environment that encourages and promotes learning.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
30.	The classroom has 1680 square feet including 40 square feet of teacher office space, 50 square feet of supplies storage and 100 square feet for equipment storage.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
31.	Document how the equipment/chemicals are used for exploration, experimentation, discovery, or etc. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
32.	Each NFS lab includes at least 2 refrigerator/freezer, 4 ranges, dishwasher, 4 sinks, 4 microwaves, washing machine, dryer, demonstration table, and/or any other capital related equipment found on the GaDOE website.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

### III. Learning Resources

Standard Statement:

Support material consistent with both program goals and performance objectives must be available to staff and students.

33.	Current textbook or digital resources, software packages, audio-visual materials and web-based resources ( <b><u>dated within seven years</u></b> ) are available to facilitate efficient and effective learning. Teachers should also have current teacher editions and resources for all three courses.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
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34.	Current (hard copy or digital) general and Nutrition & Food Science professional magazines (ex. <i>Today's Dietician</i> , <i>Food &amp; Nutrition</i> , <i>Nutrition I-Mag</i> , etc.) and newspapers related to the instructional program are available and accessible for student and instructor use.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
35.	A variety appropriate, up-to-date multi-media equipment and hardware such as flip charts, LCD projectors, "Smart Boards," speakers, interactive projectors, digital cameras, video cameras, DVD players and writers, tablets and other emerging instructional technologies are readily available to the classroom.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
36.	A computer or tablet is available in the NFS classroom, one for every two high school students.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
37.	High school students use classroom computers, tablets and other available technology to complete program objectives.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

#### IV. Instructional Staff

**Standard Statement:**

The instructional staff must have technical competency and meet all state and local requirements for certification in Nutrition and Food Science.

38.	<p>The high school NFS classroom teacher(s) holds an applicable certificate from the Georgia Professional Standards Commission to teach this pathway.</p> <p>*If the teacher(s) is "new", have certificate requirements accomplished by time of On-Site Evaluation.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
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39.	The high school teacher(s) has/have passed the NFS Industry Certification Content Test.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
40.	The high school Nutrition & Food Science teacher(s) is a current member of ACTE, GACTE & GATFACS.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
41.	Optional: The high school Nutrition & Food Science teacher(s) is a current member of another related professional organization related to FACS, Nutrition and/or Food Science such as AAFCS, Society for Nutrition Education and Behavior, Institute for Food Technology, Academy of Nutrition and Dietetics, and/or Georgia Nutrition Council.	<b>Optional:</b> <input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
42.	The high school Nutrition & Food Science teacher(s) holds a current ServSafe Handler AND Manager Certification.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
43.	The high school Nutrition & Food Science teacher(s) has attended at least 25 hours of professional development specifically related to Nutrition and Food Science in the last three years.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
44.	The high school teacher(s) attended the NFS Industry Certification Workshop.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

45.	Document any additional teacher's responsibilities beyond the classroom and FCCLA for the last three years.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
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## V. CTSO's

Standard Statement:  
 The program will provide student leadership opportunities through a career technical student organization (CTSO).

46.	Students are affiliated with Family, Career and Community Leaders of America (FCCLA) at the state and national level. *Include official member registration for last three years. *12 members required to affiliate	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
47.	FCCLA is an integral part of the NFS program and curriculum including participation in regional, state and national events and competitions for the last 3 years.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
48.	The program promotes interest in Nutrition & Food Science through community service activities, national and state projects. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
49.	Records are kept to document internal and external promotion of FCCLA. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

50.	Long term partnerships and professional relationships have been formed with local business, industry, institutions, agencies to support and enhance NFS Program and/or FCCLA activities. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
51.	Students compete in FCCLA State and/or STAR Events related to the Nutrition and Food Science pathway. (i.e. Digital Delish Dish, Food Innovations, Nutrition and Wellness, Sports Nutrition, Job Interview, Entrepreneurship, Career Investigation, and etc.) (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
52.	FCCLA Officer Team at the on-site visit will provide a presentation documenting FCCLA events, activities, and involvement from the past 3 years.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

## VI. Program Promotion

<p>Standard Statement: The program is promoted within the school, school system, and community.</p>
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53.	The NFS program conducts a variety of in-school promotional activities such as exhibits, websites, blogs, bulletin boards, school commercials, posters, brochures, and local educational materials. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
54.	The NFS program utilizes three or more venues to promote out-of-school activities such as newspaper articles, radio/television appearances, social media contacts, billboards, exhibits in the community, and community service. Documentation should include three examples over a three-year timeframe.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

55.	Written literature and information sessions on the Nutrition & Food Science program are available to high school students prior to enrollment. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
56.	High school students and/or their families are informed of community events that would meet their nutritional and wellness needs, i.e. cook-offs, health fairs, taste of ***, farmer's markets, and etc. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
57.	A collaboration is consistent between the program and higher education schools and programs. Ex.-articulations, presentations, field trips, guest speakers etc. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

### Advisory Committees

**Standard Statement:**  
 An advisory committee consisting of a majority of Nutrition and Food Science related professionals is in place for the Nutrition and Food Science program in this specific school.

58.	The program has an active advisory committee that is NFS specific and meets at least twice a year. Three years of agendas and detailed minutes (including attendance) are on file.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
59.	The ethnic make-up of the advisory committee is representative of the school population and composed of: male and female representatives, minority groups, persons with expertise in the Nutrition and/or Food Science field, at least 6 persons from the local nutrition/food science and related services industry, school nutrition, a former or current student, an FCCLA member and parents. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	



60.	The advisory committee is actively involved with FCCLA and/or the Nutrition & Food Science program eg. preparing for competition, judging competition, working with community service projects, fundraising, visiting the classroom, or providing off-site educational experiences etc. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
61.	The current Nutrition and Food Science Georgia Standards of Excellence (curriculum) is reviewed by the advisory committee at least once a year with suggestions made for improvement as needed. Suggestions are recorded in the minutes. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
62.	Document efforts to recruit business/industry representation on the advisory committee. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
63.	Document communication with advisory members (invitations to attend meeting, thank you notes, to serve as resource people, to judge FCCLA events, workshop presentation, etc.). (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

## VII. Career Guidance

Standard Statement:

Systematic pre-admission testing, interviews, counseling services, school placement and follow-up procedures must be used.

### A. Career Guidance Opportunities

64.	Contact is made with middle school students and/or underclassmen about the Nutrition and Food Science program at the high school. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
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65.	An organized plan for providing nutrition and food science career guidance information to students is available. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
66.	Information is provided to students regarding opportunities to participate in work-based learning experiences in high school related to Nutrition and Food Science. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
67.	The NFS teacher has an established system for three years on following up with former students who have completed the pathway using email, Google form, social media, or etc. An sample survey can be found on <a href="http://www.ganfs.org">www.ganfs.org</a> .	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
68.	Students are informed about Nutrition and Food Science Dual Enrollment and/or articulated credit opportunities. Or an attempt has been made by the teachers and/or administration to establish dual enrollment and/or articulation opportunities for the students. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
69.	Students are made aware of the local job markets related to Nutrition and Food Science and where they may find employment. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
70.	Students participate in <b>job shadowing</b> experiences for the past three years. Provide a list of the students, grade level, name of company where job shadowing was completed, and the types of career(s) shadowed.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
71.	Students complete a <b>career research project</b> in each course (FNW, FFL, or FS). Provide at least one example with assessed student work for each of the courses. Activities should vary in format and depth based on the course.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

72.	Students are exposed to <b>career focused field trips/guest speakers</b> in each course (FNW, FFL, or FS). Provide news articles/pictures with captions or other documentation for the past three years.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
73.	Students complete a <b>mock interview</b> during the pathway. Provide interview outlines, questions, and/or pictures with captions for the past three years.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
74.	Students complete a <b>career portfolio</b> which includes a cover letter, resume, and follow-up letter. Provide a copy of three portfolios with assessment over the past three years.	<input type="checkbox"/> YES <input type="checkbox"/> NO	

**B. Internships/WBL (If Applicable) Internships are defined as the experience associated with Work-Based Learning, not a course-embedded (e.g., FNW, FFL, or FS).** The student works the equivalent number of hours as they would have sat for seat time to earn the credit in a face-to-face class. In one hour schedules, this will be 5 hours per week per period the student is away from school assigned to the internship. For 90 minute block schedules this would be 7.5 hours per week per block that the student is released from school for the internship placement/credit earned. Internship can be paid or unpaid. This does not include lab/field experiences which are embedded in the first three courses (FNW, FFL, or FS).

75.	Documentation of the rules, regulations, policies, and procedures between the school and the student's internship or work-based learning worksite are available to and used by students.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
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76.	Training agreements and training plans are used to support student progress in internships or work-based learning. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
77.	The instructor or Work Based Learning Coordinator (WBLC) uses C-Net or similar software to report student data and work experiences. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
78.	Students have mastered proficiencies in employability skills related to their pathway (portfolio, workplace readiness certificate, GA BEST certificate, etc.). Documentation should include three years with three students each. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
79.	Students enrolled in a Nutrition and Food Science (NFS) WBL experience for the past three years. Provide name of student, place of employment, and position over the past three years.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
80.	Students employed in a Nutrition and Food Science (NFS) related position, but NOT enrolled in WBL. Provide name of student, place of employment, and position over the past three years.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
81.	Nutrition and Food Science teacher and WBL Coordinator collaborate concerning WBL opportunities for students who complete the pathway. (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

## VIII. Health & Safety

Standard Statement:

Health and safety rules must be observed by teachers and students at all times in the Nutrition and Food Science Program

82.	Students are familiar with current emergency procedures (fire, tornado, bomb, active shooter, etc.)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
83.	Students are administered a teacher/text developed safety/chemical/use of equipment test that assesses their knowledge of safety issues in the Nutrition and Food Science lab. Students are expected to pass with 80% accuracy before being allowed in the lab. Documentation should include class rosters with student scores for the past three years and all three courses.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
84.	Hand washing procedures are taught and practiced prior to working in the lab. Teachers should use information from the Clean section of the FightBAC Campaign. <a href="http://www.fightbac.org/">http://www.fightbac.org/</a> (3 years)	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
85.	Exits are clearly marked and free of obstruction.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
86.	Fire alarms are available and working.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

87.	Fire extinguishers are available, mounted in appropriate places; the inspection date is current.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
88.	High school NFS teacher(s) hold(s) current, CPR <b>AND</b> Fire Safety Certification.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
89.	<p>Students have fire safety education prior to working in the lab. (3 years)</p> <p>Optional: Number of students receiving Fire Safety Certification this year.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
90.	<p>Students have CPR &amp; First Aid education prior to working in the lab. (3 years)</p> <p>Optional: Number of students receiving CPR/First Aid Certification this year.</p>	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	
91.	Students are consistently taught a Culture of Safety in the classroom/lab settings. Evidence should include three different activities with accessed student work over the last three years. Ex. Lab rubric, lesson plans, journaling, etc.	<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>	

## Appendix B – Food Lab Equipment

<u>Quantity</u>	<u>Equipment</u>	<u>Quantity</u>	<u>Equipment</u>
1	2-Piece tube pan	1	muffin pan
1	biscuit cutter, 2-inch	1	pastry blender
1	blender	1	pie plate, glass
5	bowls, small	1	pizza pan
1 per lab group member	clothespins	1	plate, glass
1	colander	1 per lab group member	plates
1	container with lid	1	printer
1	cookie sheet	1	rolling pin
2	cooling rack	2	rubber scrapers
5	cups	1	saucepan, 1-Quart
7	custard cups	1	saucepan, 1 1/2-Quart
2	cutting boards, 1/2 inch thick	1	saucepan, 2-Quart with lid
1	double boiler	1	saucepan, 3-Quart
1	electric mixer, portable	6	saucers
1	filtration pitcher with filter	1	scoop, small
1 per lab group member	forks	1	skillet, 6-to 10-inch with nonstick finish
3	freezer containers	1	spatula, bent-edge
2	funnels	1	spatula, straight-edge
1	grater	1	spoon, slotted
4	hot pads	1	spoon, wooden
1	knife, chef's	1 per lab group member	spoons
1	knife, paring	2	spoons, mixing
1	knife, serrated	4	spoons, serving
1	knife, utility	1	thermometer, digital
1	ladle, small	1	thermometer, instant-read
1	liquid measuring cup, 500-mL (2-cups) with milliliter divisions	1	tongs
1	loaf pan	1	towel, linen
1	metric dry measuring cups, 50 mL, 125 mL, and 250mL	3	towels, terrycloth
1	metric measuring spoons, 1 mL, 2 mL, 5 mL, and 15 mL	1	vegetable brush
1	mixing bowl, large	1	vegetable peeler
1	mixing bowl, medium	1	whisk
1	mixing bowl, small		

## Appendix C – Scientific Equipment

<i><u>Quantity</u></i>	<i><u>Equipment</u></i>	<i><u>Quantity</u></i>	<i><u>Equipment</u></i>
2	beakers, 50-mL	1	metric ruler
4	beakers, 100-mL	1	microscope
3	beakers, 150-mL	5	microscope slides with cover slips
5	beakers, 250-mL	1	mortar and pestle
2	beakers, 400-mL	1	needle
1	beakers, 500-mL	1	oil immersion microscope
1	beakers, 1000-mL	1	permanent marker
1	beaker tongs	4	petri dishes
1	blindfold	1	pH indicator paper
2	burets	1	pH meter (optional)
1	burette stand	1	plastic gasket
1	calculator	1 pair per lab group member	safety glasses
1	crucible	1	square pan, 9 inch
1	electronic balance	1	standard mass, 100-gram
1	Erlenmeyer flask, 125-mL	1	strainer
4	Erlenmeyer flask, 250-mL	1	test-tube rack
1	evaporating dish	25	test-tubes with lids or stoppers
1	eyedropper	1	test-tube tongs
1	gas flame source (Bunsen burner or gas stove)	3	thermometers
5	glass rods	1	thermometer holder
3	graduated cylinders, 10-mL	1	titration stand
2	graduated cylinders, 25-mL	1	top plate
2	graduated cylinders, 100-mL	1	UV light source
1	hair dryer	1	viscosity ring
1	inoculating top	2	wash bottles
1	magnifying glass	2	watch glasses
1	metal cylinder	1	wax pencil



## Appendix D – Laboratory Supplies

<b>Common Chemical Supplies</b>	
<u>Supply</u>	<u>Amount per Lab Group</u>
Ammonia	15 mL
Chlorine Bleach	16 mL
Epsom Salt	15 mL (1 tablespoon)
Fructose solution	5 mL
Glycerin	1 drop
Hydrogen Peroxide	35 mL
Iodine Tincture	1 mL
Milk of Magnesia	15 mL
NaCl solution, 1 M solution	100 mL
Pectin, commercial	49 g (1 package)
Potassium chloride (salt substitute)	45 g per class
Rennin (junket)	0.6 g (1/2 rennet tablet)
Sodium chloride (salt)	1 g
Sodium hydroxide (lye), 0.5, M solution	42 mL
Sucrose (sugar) solution	30 mL
Vitamin C tablet	1 crushed
<b>Scientific Supplies</b>	
<u>Supply</u>	<u>Amount per Lab Group</u>
2, 6-dichloroindophenol, 0.1% solution	1 L per class
Acetic Acid	7 mL
Asorbic acid solution	
Benedict's solution	50 mL
Calcium chloride solution	20 drops
crytal violet*	1 to 2 drops
Petri dishes with agar, disposable	6 per group plus 1 per student
Ethanol (ethyl alcohol)	30mL (2 tablespoons)
Glucose solution	5 mL
Gram's iodine*	1 to 2 drops
Immersion oil	2 drops
Lactose solution	5 mL
Maltose solution	5mL
Microscope slides, disposable	1 per student
Potassium permanganate (KMnO <sub>4</sub> )	4 g
Safranin*	1 to 2 drops
Serratia marscens or Bacillus subtilis bacterial culture	1 mL
Sodium bicarbonate	2 g
Sodium citrate	0.1 g (<1/8 teaspoon)
Sodium nitrite	0.02 g
Sodium phosphate (Na <sub>2</sub> HPO <sub>4</sub> )	2 g
Starch solution	5 mL

## **Appendix E – Sample Agenda for Industry Certification Site-Visit**



### SCHOOL'S LETTERHEAD

\*\*\*Revise the agenda to accommodate local school schedule.\*\*\*

8:30AM - 9:15AM	Breakfast and Informal Interview w/ Advisory Board including System Administrators, Parents and Students*
9:15AM – 9:45AM	FCCLA Presentation to include a 3 Year Overview and Student Presentation of a Nutrition and Food Science Project
9:45AM - 10:00AM	Tour of Nutrition Lab and Classroom
10:00AM - 12:00PM	Review Industry Certification Documentation
12:00PM - 12:30PM	Working Lunch
12:30PM – 1:00PM	Informal Student Interview of 3-5 Students on Different Levels
1:00PM - 2:30PM	Review Industry Certification Documentation
2:30PM - 3:00PM	Exit Interview with NFS High School Teacher(s) and Administrator(s)

### **\*Continental Breakfast with NFS Certification Team and Advisory Committee Members**

Suggested attendees at breakfast:

- Advisory Committee Members
- High School Administrators
- System Administrators
- FCS Department Teachers
- School Partnership Members
- FCCLA Officers
- Parents

### **NFS Teacher's Schedule and Location for Day of Site Visit:**

\*\*\*List Below\*\*