



Department of Chemistry  
Shineman Center, Oswego, NY 13126  
fehmi.damkaci@oswego.edu | 315 – 312 2698

February 4, 2022

From: Fehmi Damkaci, Chair of Department of Chemistry

Re: Grain Lab Micro Credentials

We would like to offer the following micro credential program to approve grain analysis competencies of our students who complete the 11 credited program as described in attached documents.

The Gran Lab has been in operation since 2015. It started with initial funding from NY State to support the Port of Oswego and farmers in the region. Since its operation, it was able to run at two locations (port and Shineman) and was able to generate funding to support paid student internships and supplies. Therefore, the program, including maintenance/replacement of equipment is self-sustained and does not rely on departmental resources.

In addition to receive credits, students will also receive micro credential to show their competencies in grain analysis which can be added into their resumes. The program, internships, and Port site runs by the collaboration of department of chemistry and Extended Learning which oversees community programs. GST333 course has been taught by Dr. Cleaine Medeiros, who is staff member at Extended Learning. Chemistry program provides academic support, assessment, and students for the program. Kristin Gublo and other faculty in department helps to recruit students to participate in the program and to work at grain lab through out the year including summers.

Thank you for your consideration.

A handwritten signature in blue ink that reads "fehmi damkaci".



**Division of Extended Learning**  
**151 Marano Campus Center**  
**315.312.2270**  
**extlearn@oswego.edu**  
**oswego.edu/extended\_learning**

## **Micro Credential Program Proposal: Academic**

### **INSTRUCTIONS:**

This form is used to approve awarding a skill badge for instructional activity. The sponsoring SUNY Oswego office completes Section I and submits the application to the Division of Extended Learning for review and approval. Please fill out the form and submit with required signatures and documentation to the Division of Extended Learning. If you have questions, please contact the Division of Extended Learning.

### **DEFINITION:**

SUNY Oswego offers credit bearing and non-credit bearing micro credentials. Students successfully completing a micro credential will be able to demonstrate specific skill competencies. Micro credentials provide an educational opportunity for students to enhance, extend and document their proficiencies and verify, validate, and attest that specific competency have been achieved. A digital badge is a virtual representation of mastery of a specific competency or set of competencies gained through learning experiences. They are valuable in that they offer more ways to showcase and share skills, knowledge, and achievements than a typical transcript. A digital badge is an icon which may be clicked to learn verifiable metadata such as the issuing institution, the date of issuance, the criteria required to earn the badge and the evidence that shows that a student has met the required criteria. Evidence is supporting information such as: the learner's work, rubrics, course information, peer or expert endorsement, narratives, documents, videos, etc. Each program requires a distinct piece of evidence that is embedded in the digital badge. Digital badges are dynamic credentials that, once provided by the institution, the student owns. They may be placed on social media sites, such as LinkedIn, added as a link to digital resumes, embedded in e-portfolios and more.

SUNY Oswego offers three types of micro credential: academic micro credential, competency badge and skill badge which may be earned in any field of study and may be interdisciplinary, resulting in a mini-concentration, and are intentionally designed to provide freedom to learn without the financial and time commitments of a degree.

Micro credentials are aligned with the competencies of 21<sup>st</sup> century workforce. Micro credential programs are specifically designed, with employers, to better equip students with the competencies that employers demand and to help them communicate those competencies in the right setting.

**SECTION I (to be completed by the sponsoring SUNY Oswego office)**

**Academic Micro Credential Title:** Grain Testing and Analysis \_\_\_\_\_

**Description:** This micro-credential program prepares students who are interested in the agricultural sciences with practical experiences and specialized knowledge in applied testing of grain grading and analysis. \_\_\_\_\_

**Outline the goals and objectives for the Micro Credential, including a list of the learning outcomes students should demonstrate upon completing the program:** Prepare workforce with minimum requirements for an entry career in grain testing and analysis

**Will this Academic Micro Credential be a part of a series? \_\_\_Yes or \_√\_No**  
**If yes, list other requirements:** \_\_\_\_\_

**What are the educational and career objectives of this opportunity?**  
Prepare interested students for developing analytical skills in grain analysis and testing

**Audience:** Chemistry, Biology, Zoology or related majors \_\_\_\_\_

**Check who can apply:**

SUNY Oswego Students only \_\_\_\_\_ General Public Only \_\_\_\_\_ Both

**SKILLS**

**Discipline specific skills that will be learned:** Grain grading and analysis, use of Near Infrared for grains and flours, Falling Number and Mycotoxins analysis, familiarize with GIPSA/USDA literature \_\_\_\_\_

**Soft skills that will be learned:**(ex. Creativity, innovation, leadership, team work, critical thinking, communication, professionalism, collaboration, negotiating, ethical decision making, other) Creativity, team work, critical thinking, communication, professionalism, ethical decision making, collaboration \_\_\_\_\_

**Completion Criteria:** Define evaluation criteria by checking the activities the learner will complete to earn badge: (for each checked box please "give further detail" in the lines below.

<input checked="" type="checkbox"/> Application	<input checked="" type="checkbox"/> Educational Experience
<input checked="" type="checkbox"/> Assessment	<input checked="" type="checkbox"/> Professional Experience
<input checked="" type="checkbox"/> Participant	<input type="checkbox"/> Project
<input type="checkbox"/> Portfolio	<input type="checkbox"/> Volunteer
<input checked="" type="checkbox"/> Presenter	<input checked="" type="checkbox"/> Other: Site Supervisor Form

**Give further detail for each of the above checked criteria on how student learning will be evaluated:** The students must be interviewed by Dr Medeiros prior to registering to GST 333 (application); an assessment is required by the EXCEL Office under supervision of Kristin Gublo (Chemistry Department); Site Supervision form approved by Dr Medeiros; Final Report by students presented to Dr Medeiros and Kristin Gublo\_

**Program Assessment:** How will the overall micro-credential be assessed to be sure student earning outcomes are being met?

The students will be assessed through the following questions and a scale of 1-5 (1-poor, 2-somewhat, 3-good, 4-very good, 5-excellent).

Questions:

1. Explain the importance of grain grading and analysis
2. What is the most important aspect in grain sampling? Explain.
3. Why moisture needs to be quantified in grains if they are dried?
4. What is test weight?
5. How to access foreign material in grains and why it is important?
6. How near infrared can be utilized in grain analysis for moisture, protein, ash and oil content?
7. What is the Falling Number assessment? Why it has to be done in 100 Celsius?
8. Why it is important to assess the presence of mycotoxins in grains?

SUNY Oswego Micro Credential Proposal: Academic

9. A comprehensive SkillSurvey (self evaluation) will be given at the course completion where the student will be inquired about NACE competencies such as Career and Self-Development, Communication, Critical Thinking, Equity and Inclusion, Leadership, Professionalism, Teamwork, and Technology.

An important aspect of the assessment is to detect where the students need to improve the understanding on the above questions. All the students need to score above 3 in all questions to be credited with the microcredential.

**Level:** \_\_\_\_\_Foundational      \_\_\_\_\_Intermediate      \_\_\_√\_\_\_Advanced

**Curriculum Outline:** Outline all curricular requirements for the proposed micro credential. CHE 111/113, CHE 212/214, GST 333, GST 498 or CHE 498 (minimum of 2 credits)\_\_\_\_\_

**Recommendation for future learning/additional Micro Credential** \_\_\_\_\_

**List any educational / industry standards this Micro Credential aligns with:** \_  
Agribusiness, grain labs, technical labs\_\_\_\_\_

**Are there any prerequisite Micro Credential?** \_√\_Yes or \_\_\_No

(if yes, explain) 1 year of Chemistry with labs (8 credits)

**Anticipated Number of Participants:** \_\_\_6\_\_\_ minimum \_\_\_12\_\_\_ maximum

**Program fee** (other than standard tuition & fees for credit courses)? \_\_\_Yes

(suggested amount\* \$\_\_\_\_\_) or \_√\_\_\_No *\*Extended Learning will work with you to determine the appropriate amount*

**Anticipated Program Start Date:** Spring/Fall\_both\_

**Frequency of offering:** Continuous

**Program Location/Modality:** SUNY Oswego and Port of Oswego Authority\_\_\_\_\_

**Academic or Administrative Point of Contact:** Kristin Gublo\_\_\_\_\_

**Sponsoring Organization(s), Agency(ies) or Institution(s):** Port of Oswego Authority, SUNY Oswego Office of Business and Community Relations, SUNY Oswego Department of Chemistry and EXCEL Office (Internship, co-op Office)

**Names/Titles of Instructors and Other Resource Persons:**

Name/title	Role in Micro Credential
Cleane Medeiros, Ph.D.	Ag Lab Director and Site Supervisor
Kristin Gublo	Chem. Dept. and Internship sponsor

**Advisement:** Please indicate how students will be advised: Extended Learning's Academic Planning Coordinator will facilitate the application process, recruitment and advisement as well as assist with the registration & payment process. The faculty coordinator will be available to consult on program content.

**Employer Testimonials collected:** 3 number (Minimum of 3 must be attached on company letterhead and submitted to Ext. Learning, if they are in email form each email must be forwarded to Ext. Learning) See page 6-8 for acceptable testimonies

**Criteria for Determining Satisfactory Completion to Participants:** \_\_\_\_\_  
Students trained and evaluated by Dr Medeiros and successful graded coursework with a C or better.

**Names/Titles of Instructors and Other Resource Persons:** Dr Cleane Medeiros, Ag Lab Director; Kristin Gublo, Department of Chemistry, William Scriber, Port Oswego Authority\_\_\_\_\_

**At the conclusion of this Micro Credential, will there be samples of student work to be uploaded for public view?** √ yes (will send to Extended Learning Office) or \_\_\_ no \* Please provide minutes or other documentation for this to Extended Learning.

Submitted by: Dr Cleane Medeiros \_\_\_\_\_ Cleane Medeiros, Ph.D.  
(Instructor/Director) Signature  
SUNY Oswego Ag Lab Director \_\_\_\_\_ 2/14/2021 \_\_\_\_\_  
Date

Kristin Croyle, Dean CLAS: \_\_\_\_\_ Kristin Croyle \_\_\_\_\_  
Signature Date  
11/30/2021

Fehmi Demkaci, Chair Chemistry Dept.: \_\_\_\_\_ Fehmi Demkaci \_\_\_\_\_  
Signature Date  
04/13/2021  
Chair signature verifies department approval

Each of the above must complete and submit the *EXTERNAL REVIEW AND EVALUATION FOR MICRO CREDENTIALLING* form to Ext. Learning

**SECTION II (to be completed the Dean of Extended Learning)**

\_\_\_\_\_ Jill Pippin \_\_\_\_\_  
\*Jill Pippin, Dean 11.30.21  
Division of Extended Learning (date)

\*Dean of Extended Learning is signing that paperwork is complete. Once this signature is obtained the department can begin putting it through governance.

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Approved by Faculty Assembly or ~~Graduate Council~~ \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA  
Approved by Academic Planning Committee \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA  
Approved by College Curriculum Committee \_\_\_\_\_ Yes \_\_\_\_\_ No x NA  
Approved by Priorities and Planning Committee \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

# Micro-Credential in Grain Testing and Analysis

September 10, 2021

## A. Mission

The 11-course micro-credential in Grain Testing and Analysis prepares students with the skills needed to succeed in today's professional world. Offered on-ground certificate, students will learn critical skills such as probing grain samples as per USDA standards, perform phytosanitary analysis, perform standard agricultural grading (test weight, moisture and foreign material), perform Falling Number analysis for wheat flours and perform near infrared analysis for grains and flours.

## B. Justification

The Port of Oswego Authority is a critical economic engine for Oswego County and all of Central New York and its facilities are federally licensed to handle grain for export. Strategically located, the port is accessible from any international port in the world and at the crossroads of the Northeastern North American shipping market. Grain handling operations at the Port of Oswego accounts for approximately one third of the Authority's total annual revenue and it is currently under expansion. This large operation is subject to regulation by the U.S. Department of Agriculture (USDA), division of Grain Inspection and Stockyards Administration (GIPSA). In 2018, approximately 58,000 metric tons of grains were exported overseas from the Port of Oswego, representing a 533% increase from the previous year. The current expansion would allow for an even greater operations of approximately 308,000 metric tons of exported grains/year.

The SUNY Oswego Agricultural Testing and Analysis Labs (Ag Lab) were launched in the Fall/2015 in response to local industry demands for closing the export loop within our regional economy. SUNY Oswego partnered with State of New York Governor Andrew Cuomo who provided a \$250,000 capital investment, and the Port of Oswego Authority provided the interface to business and industry to create a student training lab in SUNY Oswego's Shineman Center for Science, Engineering and Innovation, and a duplicate industry lab at the Port of Oswego Authority. As a result, a valuable experiential learning opportunity in grain testing and analysis is available to SUNY Oswego students.

### Testing Capabilities:

- 1. NIR testing (Infratec™ 1241 Grain Analyzer):** measuring moisture, protein, fat and starch content in whole grain and flour
  - Barley, corn, durum flour, durum wheat, field peas, oats, rapeseed, rye & mixed flour, rye, sorghum, soybeans, triticale, wheat flour and wheat
- 2. Falling Number Analysis:** to assess sprouting level of wheat and determine flour quality
- 3. Phyto-sanitary analysis:** Fungal contamination analysis for corn, wheat or barley: measuring the amount of vomitoxin/Don or Aflatoxin in most grain crops
- 4. Standard Agricultural Grading:** Assessment of Moisture, Test Weight and Foreign Material

The SUNY Oswego Agricultural Testing and Analysis Laboratories is seeking the approval of the Grain Testing and Analysis Micro credential for our students that is both industry-friendly and responsive to USDA testing compliance.

### C. Learning Outcomes & Assessment

Students will:

- a. Probe grain samples arriving in truck loads by following the z standard by USDA
- b. Perform phytosanitary analysis – vomitoxin, zearalenone
- c. Perform standard agricultural grading (test weight, moisture and foreign material)
- d. Perform falling number analysis for wheat
- e. Perform near infrared analysis for grains and flours

### D. Certificate Description

#### 1. Curriculum Outline

This is a for credit certificate.

#### **Grain Testing and Analysis Micro-Credential (11 cr)**

##### *Requirements*

##### **Chemistry Requirements (8 cr)**

General Chemistry 111/113 Credit: 4

General Chemistry 212/214 Credit: 4

##### **Grain Testing and Analysis Requirements (1 cr)**

General Studies 333 Credit: 1

##### **Internship (2 cr minimum)**

CHE 498 or GST 498: 2 (minimum)

#### 2. Course Descriptions

##### ***General Chemistry 111/113***

The first course in a two-semester course in chemistry (with laboratory) that presents fundamentals of atomic theory and molecular structure, chemical bonding, and the chemical and physical behavior of matter.

##### ***General Chemistry 212/214***

The second course in a two-semester course in chemistry (with laboratory) that presents fundamentals of atomic theory and molecular structure, chemical bonding, and the chemical and physical behavior of matter.

##### ***General Studies 333***

This course provides an interdisciplinary overview of grain grading and analysis. Distinguishing features include sampling, grain inspection, weed seed identification, stored grain pests,

common mycotoxins found in grains & testing, assessment of moisture, foreign material, test weight, falling number, quantification of protein and oils. Additionally, this course gives the students and opportunity to connect skills and knowledge with practical experience with focus on occupations associated with the field of grain grading and analysis. Students will be required to attend lectures, write papers, meet with the instructor in class and/or individually, and work in a professional setting.

**CHE 498 or GST 498**

A semester long experiential learning placement with the Grain Testing and Analysis Lab at the Port of Oswego. Students apply knowledge in grain analysis gained during GST 333 preparatory course.

**3. Course Schedule**

Year 1-2	Year 3	Year 3-4
Fall/Spring	Spring	Spring/Fall
<ul style="list-style-type: none"> <li>• CHE 111/113</li> <li>• CHE 212/214</li> </ul>	<ul style="list-style-type: none"> <li>• GST 333</li> </ul>	<ul style="list-style-type: none"> <li>• GST 498 or</li> <li>• CHE 498</li> </ul>

**4. Instruction Modalities**

This program targets STEM majors who meet the chemistry requirement during freshman and sophomore years. The technical and analytical nature of this certificate calls only for on-ground instructional mode including several laboratory practices to be carried out at the Ag Lab (G52 Shineman) prior to a paid internship at the Port of Oswego Authority.

**E. Enrollment**

*What is the projected enrollment when the certificate begins?*

We anticipate that 6-12 students will enroll in the certificate every year.

*What is the projected enrollment after five years?*

We anticipate a steady enrollment of 6-12 students annually.

*How were these projections determined?*

Projections came from four areas of consideration: 1) Performance of existing STEM majors and minors that will expand their degree application to grain testing and analysis; 2) Agribusiness needs for technical expertise; 3) Department of Chemistry fully accepts this certificate to fulfill CHE 498 graduation requirement; and 4) A paid experience is offered at the Port of Oswego Authority.

**1. Existing Internship**

Grain Testing and Analysis, an existing paid internship since 2015, has trained (70) students, provided \$144,829 in student payroll and \$164,000 in revenue. The technical and analytical training provided will allow the students to expand their skillset for careers also in agribusiness and/or related.

**2. Community Interest**

The Department of Agriculture and Markets of New York has supported the partnership between the Port of Oswego Authority (POA) and SUNY Oswego to develop a program to train specialized workforce in agribusiness especially in grain testing and analysis. POA has recently opened its 22,000 metric ton grain storage and handling facility to grain deliveries including a state of art grain laboratory operated by SUNY Oswego STEM students (to be open soon) where local farmers can deliver their grain production locally for export or for domestic use. Students also analyze flour samples from local mills, an applied learning that propels them to profitable careers statewide.

**3. Support Letters (See Attachments)**

- William Scriber, Executive Director Port of Oswego Authority
- Timothy A. Frump, Vice President Perdue AgriBusiness Grain, LLC
- L. Michael Treadwell, CECD, Operation Oswego County

Department Recommendation

- Dr Fehmi Damkaci, Department of Chemistry, Chairperson

**F. Faculty Chart**

NAME AND TITLE	PROGRAM COURSES	DEGREE
<b>Chemistry Department</b>		
Kristin Gublo, Department of Chemistry	Faculty Sponsor	M.S., Chemistry, SUNY Oswego
<b>SUNY Oswego Ag Lab Director</b>		
Cleane Medeiros, Ag Lab Director	GST 333, Site Supervisor	Ph.D., Pharmacology, University of Strathclyde, Glasgow, Scotland, UK.

**G. Advisement**

In consultation with the Program Director (Dr Cleane Medeiros), an Academic Planning Coordinator (APC) from the Division of Extended Learning will triage inquiries, facilitate application, registration and work with students to select courses that align with the program's objectives. APCs also facilitate access to student services and communicate the completion of the

micro credential and how students may access their digital badge at the conclusion of the program.

Program Director, Chemistry Advisor and Extended Learning will manage student community outreach, recruitment, admissions, transcripts, and so on.

## **H. Resources**

### **1. Revenue and Expenditure Table (see attached)**

**Ag Lab**

**2021-22 Program Area Budget**

<b>ACCOUNT</b>	<b>REVENUE</b>	<b>2021-22 Actual YTD</b>	<b>2021-22 Budget</b>
62505	Program Income- Port Testing Services	\$ -	\$ 43,686
62505	NYS Funding (Received 2016-17)	\$ -	
62505	Non-Port Grain Testing	\$ -	\$ 1,000
62510	Sponsorship Revenue	\$ -	
62515	Tuition Revenue	\$ -	
62520	Event Registration Fees	\$ -	
62525	Contribution Revenue	\$ -	
62528	Contributed State OTPS	\$ -	
62529	Salaries - Campus Admin - Non OBCR	\$ -	
62530	Salaries - OBCR - State Allocation	\$ -	
	<b>TOTAL</b>	<b>\$ -</b>	<b>\$ 44,686</b>

<b>ACCOUNT</b>	<b>EXPENSES</b>	<b>2021-22 Actual YTD</b>	<b>2021-22 Budget</b>
80407	Salaries - Campus Admin - Non OBCR	\$ -	
80408	Salaries - OBCR - State Allocation	\$ -	
80409	Salaries - OBCR - IFR	\$ -	
80410	Salaries - OBCR - RF	\$ -	
80412	Temporary Service- Student Payroll	\$ -	\$ 30,337
80413	Extra Service- Director Payroll	\$ -	
80417	Fringe - Campus Admin - Non OBCR	\$ -	
80418	Fringe - OBCR - State Allocation	\$ -	
80419	Fringe - OBCR - IFR	\$ -	
80420	Fringe - OBCR - RF	\$ -	
80425	IFR Admin/Maintenance OH Fees	\$ -	\$ 2,446
80426	Facilities (FAC) Administrative Fee - RF	\$ -	
80445	Licenses, Permits and Fees	\$ -	
80447	Consulting/Contract Services	\$ -	
80450	Professional Development	\$ -	\$ 200
80466	Catering Provisions	\$ -	
80470	Travel	\$ -	
80471	LOC Retreat Expenses	\$ -	
80490	Software and Web Subscriptions/Hosting Fees	\$ -	
80510	Supplies	\$ -	\$ 1,000
80520	Telephone	\$ -	\$ 150

80524	Rent Expense		\$	-	
80525	Utilities		\$	-	
80526	Facilities Buildout Expense		\$	-	
80527	Cleaning Expense		\$	-	
80530	Postage Expense		\$	-	\$ 50
80540	Printing Expense		\$	-	\$ 50
80550	Advertising Expense		\$	-	
80585	Equipment Purchase		\$	-	\$ 1,500
80590	Repairs and Maintenance- Equipment Service Contr		\$	-	
80630	Registration Fees		\$	-	
80635	Sponsorship		\$	-	
<b>TOTAL EXPENSE</b>			\$	-	\$ <b>35,733</b>

<b>NET REVENUE</b>			\$	-	\$ <b>8,953</b>
--------------------	--	--	----	---	-----------------



December 19, 2018

Cleane Medeiros, Ph.D.  
Interim Director, Agricultural Testing and Analysis Laboratories  
319 Mahar  
SUNY Oswego, Oswego NY 13126

Dr. Medeiros:

The purpose of this letter is provide support for SUNY Oswego's Agricultural Testing and Analysis Labs' efforts to develop a Certificate in Applied Agricultural Science Micro-credential Program.

For the past three years, SUNY Oswego has partnered with the Port of Oswego Authority to provide agricultural testing and analysis of grains at the Port. Students majoring in sciences (for instance, chemistry/biochemistry, biology and zoology) receive training (40 hours) during the Spring semester followed by a paid internship (at least 80 hours) grading inbound grains in response to business and industry demand.

SUNY Oswego has created the curriculum in grain grading and analysis in close consultation with the United States Department of Agriculture (USDA). Featured topics include sampling, grain inspection, assessments of moisture, foreign material, test weight, falling number, quantification of protein and oils, stored grain pests, weed seed identification and quantification of mycotoxins. These skills provide student interns with the academic knowledge, professional development and undergraduate research and scholarly activity necessary for employment opportunities within the agribusiness industry.

Accordingly, the Port of Oswego Authority fully supports this partnership with SUNY Oswego in developing a relevant workforce for agribusiness and further supports the local agricultural industry and growing demand for food safety.

Sincerely,

William W. Scriber  
Executive Director - CEO  
Port of Oswego Authority

**L. Michael Treadwell, CEcD**  
*Executive Director*



44 West Bridge Street  
Oswego, NY 13126  
315-343-1545

Fax: 315-343-1546  
email: [ooc@oswegocounty.org](mailto:ooc@oswegocounty.org)  
[www.oswegocounty.org](http://www.oswegocounty.org)

## **Operation Oswego County**

*An Economic and Job Development Corporation Serving Oswego County, NY*

February 20, 2019

Cleane Medeiros, Ph.D.  
Interim Director, Agricultural Testing and Analysis Laboratories  
319 Mahar  
SUNY Oswego, Oswego NY 13126

Dr. Medeiros:

Operation Oswego County is pleased to support SUNY Oswego's efforts in developing a Certificate in Applied Agricultural Science Micro-credential Program.

Our mission is to serve as the County's designated economic development agency by creating and retaining job opportunities, diversifying and strengthening our economic base, and developing the local economy in a planned, organized and environmentally friendly atmosphere. This mission is consistent with the goals of the SUNY Oswego Agricultural Testing and Analysis Labs, where student workers are trained and provided experiential learning opportunities in demand areas within the local agribusiness sectors.

We are excited to see new initiatives for workforce development and job creation in Oswego County through the work at the Ag Labs. Specifically, the collaboration between SUNY Oswego and the Port of Oswego Authority to train science students to efficiently deliver grain testing and analysis, responds to a pressing human capital need within our region.

The activity and efforts made over the past three years through the SUNY Oswego Agricultural Testing and Analysis Laboratories has had a lasting impact on our regional economy. For these reasons and others, we support the work by your campus in aligning our strategies.

Sincerely,

**Operation Oswego County**

L. Michael Treadwell, CEcD  
Executive Director



Perdue AgriBusiness LLC  
P.O. Box 1537  
Salisbury, MD 21802  
www.perdueagribusiness.com

---

November 26, 2018

Cleane Medeiros  
Interim Director, Agricultural Testing and Analysis Laboratories  
SUNY Oswego  
319 Mahar  
Oswego, New York 13126

Dear Cleane,

Thank you for your recent letter detailing the next phase of the SUNY-Oswego process for the Applied Agricultural Science Micro-credential Program Proposal.

Perdue AgriBusiness Grain, LLC markets and handles grain at numerous locations purchasing grain from farmers and country elevators while serving a varied end use customer base around the world. We have several locations in the state of New York and have an agreement with the Port of Oswego to handle grain and products. We serve a variety of domestic and export customers via the Port of Oswego and have developed a good working relationship with SUNY-Oswego.

SUNY-Oswego has been providing grain grading and analysis services for Perdue AgriBusiness particularly at the Port of Oswego. Perdue AgriBusiness has also utilized SUNY-Oswego's expertise in analyzing samples submitted from other locations to detect mycotoxin presence.

We are appreciative of the skills and expertise that SUNY-Oswego students are developing in the Agricultural Science Micro-credential Program as it prepares them for future employment opportunities in the agricultural field. We are supportive of SUNY-Oswego being granted licensed status by USDA so they can perform officially approved grain grading, analysis and weighing services for the various export and domestic programs we perform.

Perdue AgriBusiness looks forward to working with SUNY-Oswego to further develop these programs to provide education and employment opportunities for SUNY students.

Sincerely,

A handwritten signature in blue ink, appearing to read "Timothy A. Frump".

Timothy A. Frump  
Vice President  
Perdue AgriBusiness Grain, LLC



*Fancy Quality Buckwheat & Wheat Products*  
**THEBIRKETTMILLS.COM**

163 Main Street  
P.O. Box 440  
Penn Yan, NY 14527

P: (315) 536-3311  
F: (315) 536-6740  
contact@thebirkettmills.com

September 29, 2021

To Whom It May Concern,

The Birkett Mills is a locally-owned, small business located in the heart of the Finger Lakes in New York State. With a focus on milling specialty grains since 1797, it is one of largest buckwheat manufacturers in the world. In addition, the Mill has also attained accreditation as a New York Grown & Certified soft red wheat flour manufacturer.

The Birkett Mills has utilized the services of the Oswego Agricultural Testing and Analysis Laboratory [Oswego Ag Lab] since 2019. During this time, the Oswego Ag Lab has provided analysis on various quality attributes of our finished wheat products, including pastry flour, cake flour and graham / whole wheat flour. The test results provide important information to our customers, insuring the highest levels of product quality.

We support the creation of a microcredential in grain testing and analysis for the Oswego Ag Lab. A formal program and accreditation validate the highest level of technical capabilities for the Lab, and for the students who gain the applied skills and knowledge. The microcredential also serves to satisfy food quality audit requirements for The Birkett Mills. Without the microcredential, we would likely suspend use of the Oswego Ag Lab, as our 3<sup>rd</sup> party audit and certification process would not be able to validate the lab's level of accreditation and technical capabilities.

We look forward to the committee's approval of the microcredential for the Oswego Ag Lab.

Sincerely,

*Kurt J. Knoblauch*

Kurt J. Knoblauch  
Analyst / Special Programs  
The Birkett Mills