

# Shining New Light in Assessment Through a New Center for Academic Excellence

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UTE S. LAHAIE & AMY J. HESTON, WALSH UNIVERSITY

IUPUI ASSESSMENT INSTITUTE

SESSION 05J IN MARRIOTT 7

OCTOBER 30, 2023 @ 7 AM

# The Presenters

## Ute S. Lahaie, Ph.D.

- AVP of Institutional Effectiveness & Assessment
- Administrative director of the Center of Academic and Professional Enrichment (CAPE)
- Administrative leader of the University Program Assessment Committee (UPAC)

## Amy J. Heston, Ph.D.

- Professor of Inorganic Chemistry, QM Faculty Liaison for eLearning
- Faculty director of CAPE (Academic Excellence Pillar)
- UPAC Chair since 2022, UPAC Vice-Chair 2021-22

# About Walsh University

## Walsh University

2020 East Maple St, North Canton, Ohio 44720-3396

General information:	(330) 499-7090
Website:	<a href="http://www.walsh.edu/">www.walsh.edu/</a>
Type:	4-year, Private not-for-profit
Awards offered:	Associate's degree Bachelor's degree Postbaccalaureate certificate Master's degree Doctor's degree - professional practice
Campus setting:	Suburb: Large
Campus housing:	Yes
Student population:	2,309 (1,558 undergraduate)
Student-to-faculty ratio:	14 to 1

[College Navigator - Walsh University \(ed.gov\)](#)

# Session Topics

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New Opportunities for Leadership in Assessment

Faculty and Student Leadership in Program Assessment

Alignment with Quality Matters Standards to Promote Student Achievement of SLOs

Assessment and Accreditation

Q&A

# At the completion of this session, you will be able to

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1

Identify new opportunities for leadership in assessment and adapt them to your own institution

2

Recognize the unique benefits of faculty and student leadership in program assessment

3

Discover the importance of QM standards in course design to enhance student achievement of SLOs



# New Opportunities for Leadership in Assessment

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# Center for Academic and Professional Enrichment (CAPE)

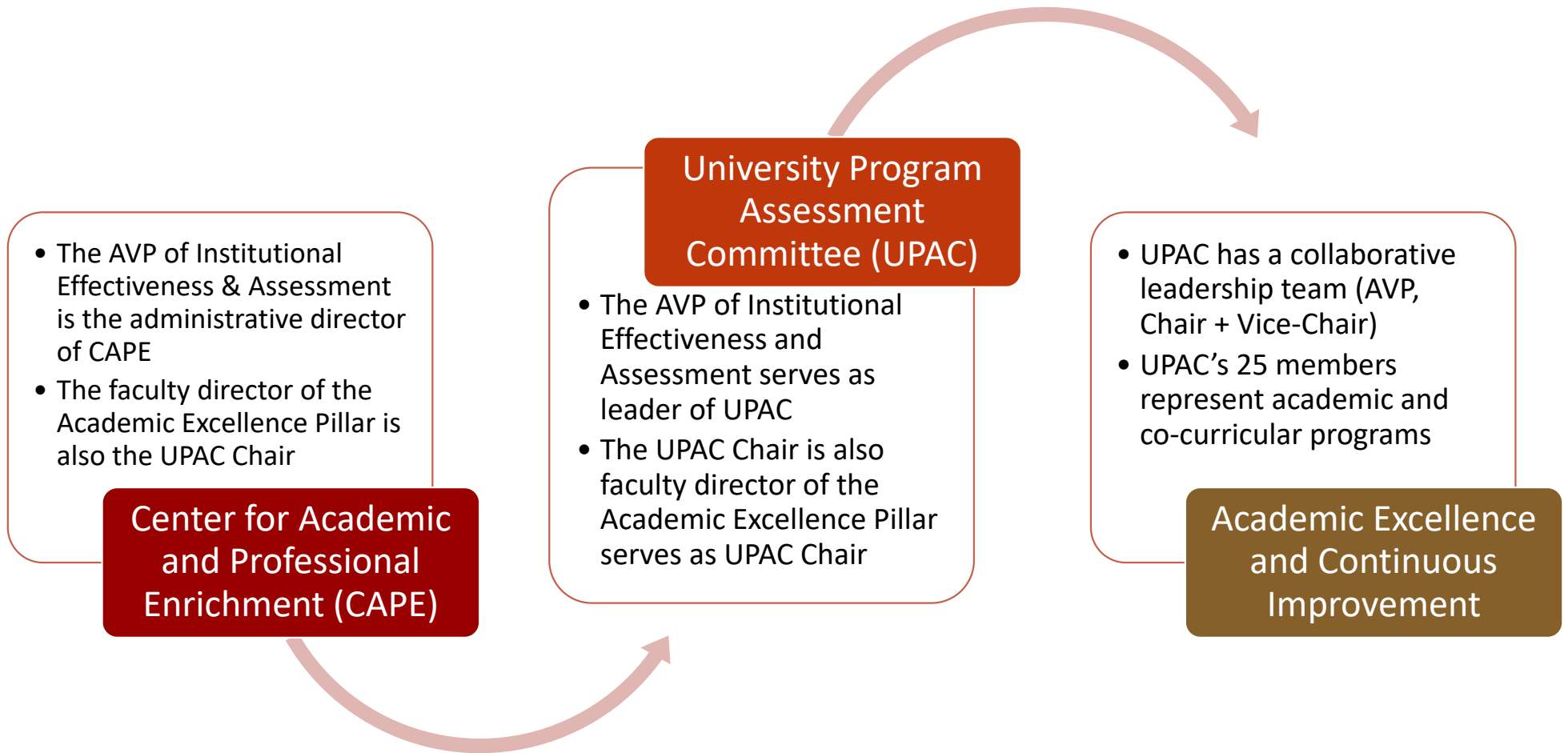
Academic  
Excellence

Professional  
and  
Leadership  
Development

Scholarship,  
Publications,  
and Grants

Leadership  
Development

Intellectual  
Engagement







Collaboration



Academic Excellence



Alignment with National  
Quality Standards (QM)



Assessment and  
Continuous Improvement

# Foundational Principles

# New Pathways in Professional Development

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Sponsored by CAPE  
& Assessment  
Committee

Assessment Kickoff Events



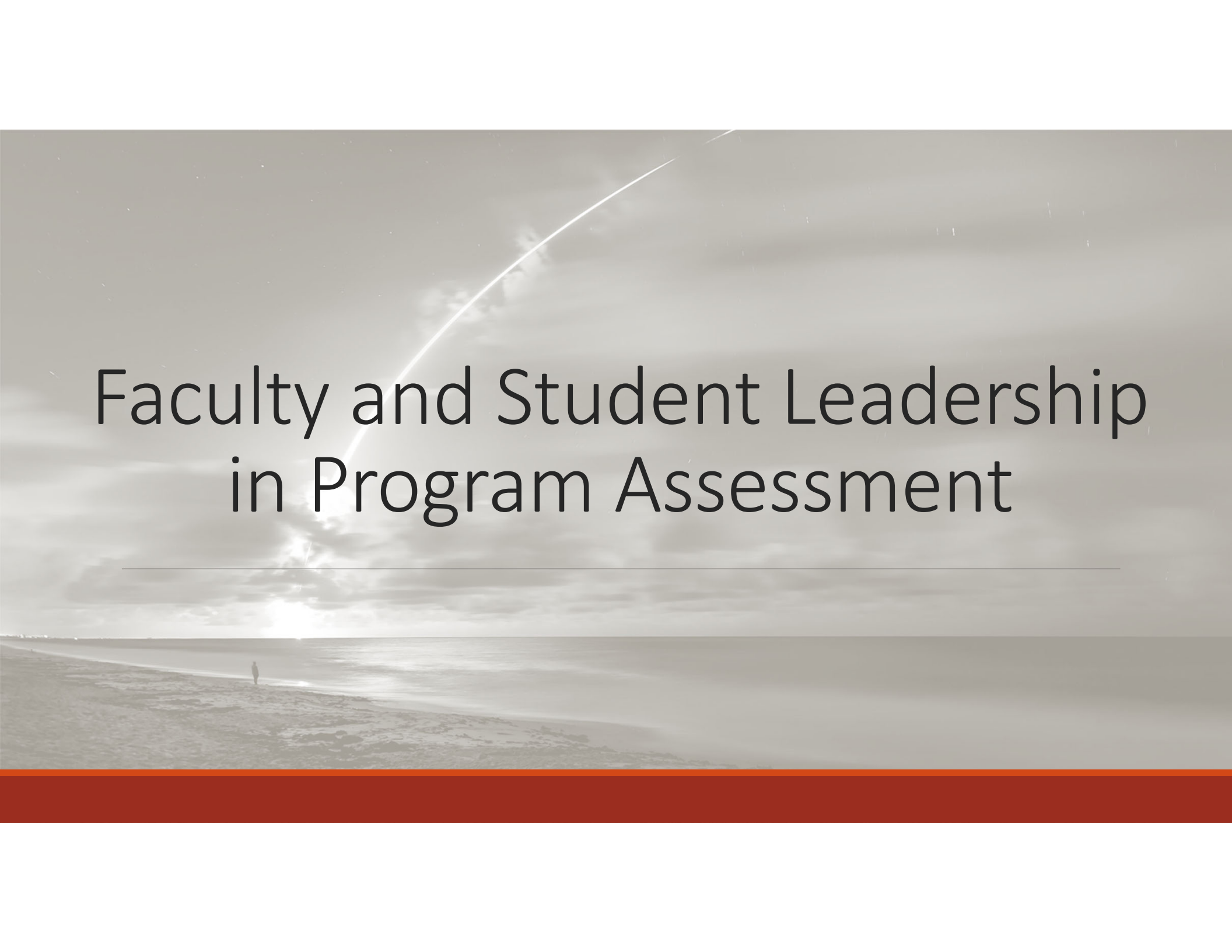
Assessment Summits



Workshops



Continuous improvement of the  
learning environment to ensure  
student success



# Faculty and Student Leadership in Program Assessment

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Introductions



Foundations of Program Assessment



Using Internal and External Surveys  
as Assessment Instruments



Ensuring Accurate and Truthful  
Assessment Results



Portfolios as Assessment Tools



Templates and Tools for the Annual  
Assessment Reporting



Q&A

# Agenda of the Spring 2023 CAPE Assessment Summit:

11 faculty members  
served as presenters

Center for Academic and Professional Enrichment (CAPE)

## 2023–24 Teaching and Assessment Kick-Off

Barrette Business & Community Center A & B

### AGENDA

10:00 – 10:10 a.m. | Welcoming Remarks

- *Michael Dumphy, Ph.D., Vice President for Academic Affairs*

10:10 – 10:50 a.m. | Course and Program Development with the End in Mind: Ensuring Academic Quality Through Academic and Co-Curricular Assessment

- *Ute Labate, Ph.D., Associate Vice President for Institutional Effectiveness & Assessment*
- *Amy Heston, Ph.D., Professor of Inorganic Chemistry/UPAC Chair 2023-24*
- *Nick Morris, Ph.D., Faculty Director of the Blouin Scholars Program*

Assessment plays a pivotal role in delivering quality instruction. By designing student learning experiences with the end in mind, educators can design purposeful learning experiences that meet specific educational objectives. In this interactive session, participants will explore new initiatives and share best practices in the assessment of academic and co-curricular programs.

11:00 – 12:00 p.m. | Navigating the Cutting Edge: Forging a Positive Student Impact in the Age of AI

- *David Grimes, M.Ed., Senior Instructional Designer & Online Faculty Development Manager, Ashland University*



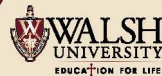
Explore how AI chatbots like ChatGPT are reshaping our classrooms and what role we can play in this revolutionary impact on education. In this dynamic session based on first-hand experiences in the classrooms, uncover strategies to manage generative AI misuse while leveraging the benefits for faculty, instructional designers, and students.

12:00 – 12:10 p.m. | Closing Remarks

- *Ute Labate, Ph.D., Associate Vice President for Institutional Effectiveness & Assessment*
- *Amy Heston, Ph.D., Professor of Inorganic Chemistry/UPAC Chair 2023–24*



REGISTER HERE



# 2023 Teaching and Assessment Kick-off Agenda



Academic Excellence:  
The Journey of Continuous Improvement



Designing Learning Experiences with the End in Mind



Organizing the Assessment Process



Co-curricular Program Assessment

## Hallmarks of a Well-Developed Assessment Process

The annual assessment process begins **before** classes start.

A **substantial number** of full-time faculty, adjuncts, and staff are involved in the assessment process.

Assessment is **ongoing** and not just episodic.

The assessment process leads to **improvements** at the course, curriculum, and program levels.

# Table Discussion: Learning Experiences

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## Think-pair-share activity

Turn to your neighbor and discuss briefly what learning experiences you planned for a specific course or co-curricular program

- What learning experiences did you design?
- How do these experiences connect to your learning outcomes?



# Honors Project

Student partnerships in assessment

Honors project 2021-2023

Evaluation of learner achievement in Organic Chemistry I Laboratory

First time a student has participated in STEM assessment, etc.

Student-faculty partnership increased student diversity

- Prepared her for a career as a science teacher
- Fostered diversity in student assessment



# Poster Presentation: Mid-East Honors Association Conference



## DESIGNING ASSESSMENT STRATEGIES TO EVALUATE STUDENT SUCCESS IN QUALITATIVE ANALYSIS FOR ORGANIC CHEMISTRY LABORATORY

Myla K. Demko, Dr. Timothy J. Smith, and Dr. Amy J. Heston\*

Walsh University, Division of Math and Sciences, North Canton, OH 44720



### Abstract

The organic chemistry laboratory provides students with the opportunity to gain new knowledge in the fundamentals of chemical reactivity and how to conduct organic syntheses. Therefore, creating laboratory experiences that teach these critical skills is vital to the learning process, particularly for science majors. In this unique study, we evaluated the effectiveness of two organic chemistry laboratory experiments with a focus on student success in crystallization techniques, gas chromatography, and lab safety procedures. Assessment rubrics were created to measure the achievement of the student learning outcomes, and students in Organic Chemistry I Laboratory were evaluated through two different means. First, visual observation was conducted to determine qualitative success. Then, students were given a set of questions to complete that pertained to the laboratory activities completed that day. When the data was collected, student performance was scored by using a 0-3 points scale. Based on the results, modifications to the labs will be implemented to ensure learner success within this course. Ultimately, this initiative is a critical step in our efforts toward continuous improvement in chemistry and the overall educational programs in the Division of Math and Science at Walsh University.

### Background

#### The History of Chemistry Education:

- ✦ 1706 – William Smith at the College of Philadelphia (University of Pennsylvania)
- ✦ Benjamin Rush – Father of Chemical Education
- ✦ Experimentation and observation
- ✦ Michael Faraday
- ✦ Christmas Lectures (1825-1861)
- ✦ Committee of Ten (1892)
- ✦ 1900s – Shift in interest
- ✦ Demonstrations, projects, clubs, field trips
- ✦ 1954 – Massive curricular development
- ✦ Cold War
- ✦ Hands-on experiments

#### The History of Assessment:

- ✦ 1912 – Ernest C. Nysey
- ✦ 1990 – National push toward evaluation and assessment
- ✦ Assessments today – Authentic assessment

### Observation Chart and Rubric

Student	Lab	Question 1	Question 2	Question 3	Question 4

Figure 1: Observation sheet used to record students during their lab performances.

### Crystallization Lab Results

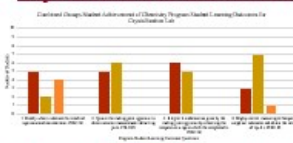


Figure 3: A representation of the data from the Crystallization Lab from both groups.

### Safety Results

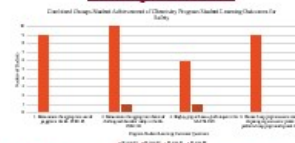


Figure 5: A representation of the safety data from both groups.

### Gas Chromatography Lab Results

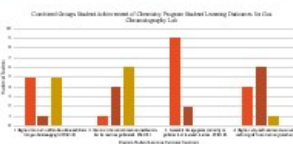


Figure 4: A representation of the data from the Gas Chromatography Lab from both groups.

### Conclusions & Future Work

#### Trends:

- ✦ Proper lab safety – consistently followed
- ✦ Demonstrating proper lab techniques – students scored mostly at or above benchmark
- ✦ New material and concepts – students struggled the most

#### Lab Modifications:

- ✦ Design homework or assignments given to explain concepts
- ✦ Creating online practice questions
- ✦ Show demonstration of concepts (physical, video)

Learning Outcomes: Crystallization Rubric, Fall 2022

Walden University | 1000 University Ave. | St. Paul, MN 55105

Course Number: CHEM 210L

Title of Course: Organic Chemistry I Laboratory

Title of Course Engagement Activity: Lab Activities – Crystallization

Description of Rubric: Post-Lab Questions and Evaluation of Lab Technique

Number Learning Outcomes Assessed: Rubric will not apply to Skill Expectation

PSLOs: #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #26, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39, #40, #41, #42, #43, #44, #45, #46, #47, #48, #49, #50, #51, #52, #53, #54, #55, #56, #57, #58, #59, #60, #61, #62, #63, #64, #65, #66, #67, #68, #69, #70, #71, #72, #73, #74, #75, #76, #77, #78, #79, #80, #81, #82, #83, #84, #85, #86, #87, #88, #89, #90, #91, #92, #93, #94, #95, #96, #97, #98, #99, #100

Assessment Scale: 1 = Exceeds the standard (85%+); 2 = Meets the standard (75%+); 3 = Does not meet the standard (75%+); 4 = No evidence (0%+)

PSLO	1	2	3	4
1. Use appropriate laboratory techniques and procedures to synthesize and purify organic compounds.				
2. Demonstrate proper laboratory safety techniques.				
3. Explain the relationship between molecular structure and physical properties.				
4. Explain the relationship between molecular structure and chemical reactivity.				

Figure 2: Rubric for assessing PSLOs #2 and #4 during the Crystallization experiment performed in the Organic Chemistry I Laboratory.

### Acknowledgements

- ✦ Walsh University
- ✦ Honors Program and Faculty
- ✦ Friends and Family



A sunset over a beach with a person walking on the shore and a bright light streak in the sky.

# Alignment with Quality Matters Standards to Promote Student Achievement of SLOs

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# QM Professional Development

29 Completed Applying the QM Rubric (APPQMR): QM's flagship course

## Additional Trainings and Recognitions

- 7 Peer Reviewer Certification
- 1 Master Reviewer Certification
- 1 Teaching Online Certificate
- 2 QM Coordinator Training
- 10 QM Certified QM Courses



# Walsh University's QM Certified Courses



**PSYC 401**

**Dr. Nina Rytwinski**



**SOC 101**

**Dr. Laci Fiala**



**HIST 103**

**Dr. Kelly Mezurek**



**SOC 311**

**Dr. Yanmei Xu**



**MBA 721**

**Dr. Michael Petrochuk**



**NURS 220**

**Dr. Andrea Price**



**CHEM 120**

**Dr. Amy Heston**



**NS 114  
NS 215  
CHEM 305 (hybrid)**

This certification mark recognizes that this course met Quality Matters Review Standards.

# New Learner Activities

## QM General Standard 5: Learning activities promote the achievement of the LOs.

- Polls
- Practice Problems
  - immediate feedback
- Class Discussions
- Group Activities

**WALSH UNIVERSITY** ECN

View Site As: [dropdown] [notifications] [user profile]

**Overview** OVERVIEW [Manage Overview]

**Course Tools**

- Syllabus
- Lessons
- Drop Box
- Gradebook
- Tests & Quizzes
- Resources
- Polls
- Course Evaluation
- ZOOM Video

**WALSH UNIVERSITY**

**CHEM 305 Inorganic Chemistry**

Dr. Amy J. Heston  
330.244.4671  
aheston@walsh.edu

**Welcome to CHEM 305**

Dear students,  
Welcome to Inorganic Chemistry, CHEM 305. This hybrid (blended) course begins on Tues., Jan. 10th and concludes on Thurs., March 2nd. Class meetings are Tuesdays

**Recent Announcements** [Link] [Help]

Options

**Announcements**  
(viewing announcements from the last 10 days)

[Welcome to Inorganic Chemistry](#)  
(Amy Heston - May 2, 2023 3:37 am)

**Message Center Notifications** [Link] [Help]

[New in Discussions](#) none

### Course Recognition and Certification for Quality in Course Design

CHEM 305: Inorganic Chemistry was designed by Dr. Amy Heston and earned the Quality Matters (QM) Certification Mark. When you see QM Certification Marks on courses, it means they have met QM Course Design Standards in a rigorous review process conducted by QM-Certified Reviewers.



This review provided independent validation of the quality, learner-focused course design through use of the Quality Matters Rubric and associated Standards, which are based on research and best practices. Quality Matters (QM) is the global organization leading quality assurance in online and innovative digital teaching and learning environments.

Time Saver Tip = Need help? Ask the IDs

Power of Partnership: Attend their office hours





# Academic Excellence

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High standards for course design makes a wide impact beyond the classroom:

- alignment with QM standards for course design
- assessment efforts to strive for continuous improvement in your program
- annual program assessment report (APAR)
- institutional criteria for accreditation



A dramatic sunset over a beach. The sun is low on the horizon, partially obscured by dark, heavy clouds. A bright, glowing light streak curves across the sky from the top right towards the sun. The ocean reflects the golden light of the setting sun. A small figure of a person stands on the beach in the distance. The overall mood is serene and powerful.

# Assessment & Accreditation

# Institutional Accreditation Requirements

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## HLC Criterion 4.B

The institution engages in ongoing assessment of student learning as part of its commitment to the educational outcomes of its students.

The institution **has effective processes** for assessment of student learning and for achievement of learning goals in academic and cocurricular offerings.

The institution **uses the information** gained from assessment **to improve** student learning.

Processes and methodologies to assess student learning **reflect good practice**, including the **substantial participation of faculty**, instructional and other relevant staff members.



# CAPE Leadership and Accreditation Requirements

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As a part of the Accreditation Year 4 Assurance Update, faculty and staff across campus collaborated with CAPE and UPAC leaders to update information related to:

Teaching and learning

Student success

Academic quality and rigor

Program assessment



This collaboration between CAPE and UPAC leaders, faculty and staff contributed to a successful reaccreditation.

# Contact Us

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- UPAC Chair 2022-23, UPAC Vice-Chair 2021-22
- Email: [aheston@walsh.edu](mailto:aheston@walsh.edu)

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