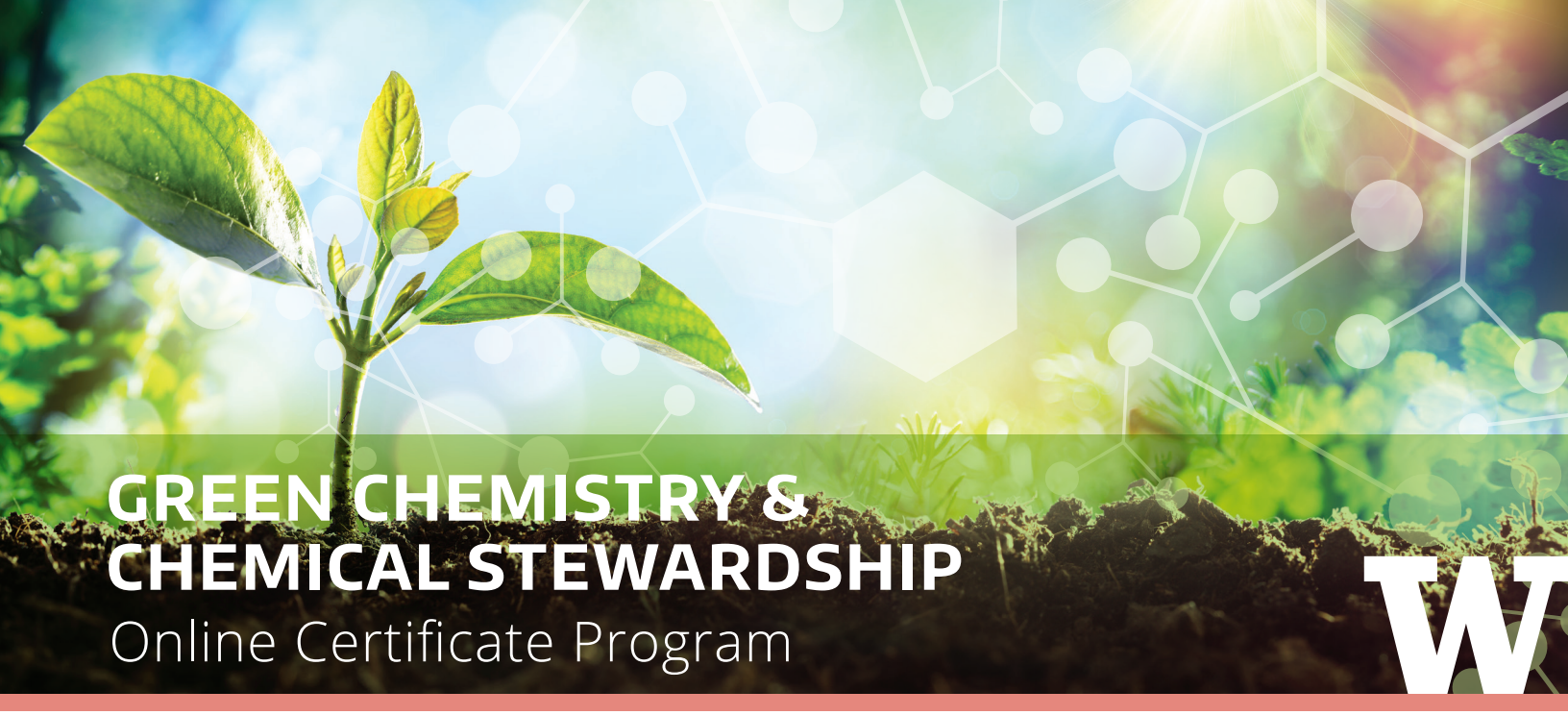


GREEN CHEMISTRY & CHEMICAL STEWARDSHIP

Online Certificate Program

*67% of global executives agree that sustainability strategies are necessary to be competitive.**

PROGRAM DATES

Sept 25, 2023–May 31, 2024

REGISTRATION

To register, visit
oshce.uw.edu
You may register for all three program courses at one time, or complete your registrations on a course-by-course basis. *Individuals who are pursuing a certificate must successfully complete all three required courses.*

INFORMATION

Northwest Center for Occupational Health & Safety
206-543-1069
ce@uw.edu
oshce.uw.edu

This certificate program is endorsed by the Association for the Advancement of Alternatives Assessment

ASSOCIATION FOR THE ADVANCEMENT OF ALTERNATIVES ASSESSMENT

Businesses are facing increasing market and regulatory pressures to use less toxic chemicals in their manufacturing processes and products, and are in need of professionals who can provide innovative solutions and more sustainable substitutes.

WHAT YOU WILL LEARN

During this 3-course program, we will explore:

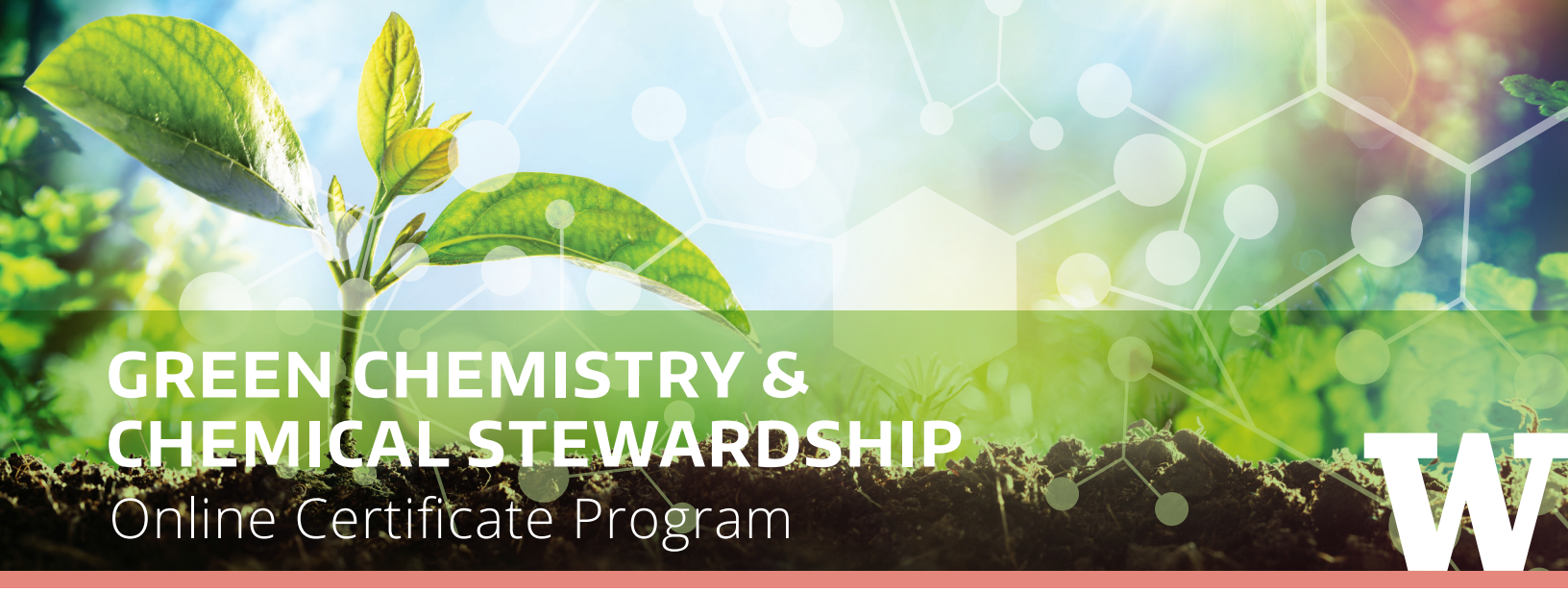
- The 12 guiding principles of green chemistry
- Business drivers and barriers to implementing sustainable practices
- Frameworks for incorporating chemical toxicity and human health considerations into product design, material selections, and supply chain decision-making
- Environmental, economic, and societal benefits of green chemistry
- The latest research and regulatory developments in the field
- New tools for chemical design and methods for comparative chemical hazard assessments

THIS PROGRAM IS FOR **YOU**

- Engineers, chemists, and materials scientists
- Environmental product managers
- Supply chain decision-makers
- Risk management researchers
- Product stewardship professionals
- Safety and health professionals
- Graduate level students in related fields
- High School teachers and academic faculty
- Legal professionals
- Building designers and architects
- Environmental and other sciences professionals in industry, labor, academia, and non-government organizations

Scan to visit the program webpage

*Brokaw, Leslie. "Five Ways That Sustainability Commitment is Up—Dramatically." MIT Sloan Management Review. 27 Nov 2012. Web. 15 Oct 2012.



GREEN CHEMISTRY & CHEMICAL STEWARDSHIP

Online Certificate Program

OVERVIEW OF THE 3-COURSE PROGRAM

Course I

Sustainability, Toxicology, and Human Health

Dates: 9/25/23–12/8/23 | Credit: 5 CEUs | Cost: $910

Overview of fundamental principles of toxicology, human health, and material science. Participants will review their own business' sustainability drivers and barriers while investigating the health and environmental hazards that contribute to human disease.

Course II

Principles of Green Chemistry

Dates: 1/2/24–3/8/24 | Credit: 5 CEUs | Cost: $910

Fundamental principles of green chemistry, including the human and ecological reasons for considering less toxic alternatives and the various green applications to chemical design. Overview of new tools and cutting edge research for the design of 21st century chemicals that minimize hazards to health and the environment.

Course III

Assessment Tools for Safer Chemical Decisions

Dates: 3/25/24–5/31/24 | Credit: 5 CEUs | Cost: $910

Decision-making tools and methods used for comparative chemical hazard assessments. Participants will have an opportunity to use these tools through the completion of a culminating project.

INSTRUCTORS

Catherine Rudisill, MS, PMP
Founder & Principal, Safer Chemistry Advisory LLC

Grace Lasker, PhD
Chair, Health Studies, & Senior Lecturer, School of Nursing & Health Studies, UW Bothell
Affiliate Faculty, Department of Environmental & Occupational Health Sciences, University of Washington

Kevin Laycock, MBA
Energy and Climate Advisor at Brailsford & Dunlavey, Inc.

Karolina Mellor, PhD
Program Coordinator, Yale Center for Green Chemistry and Green Engineering

Richard Morgan, MS
Senior Process Chemist, Modumental

Ben Packard, MBA
Harriet Bullitt Endowed Executive Director, EarthLab, University of Washington

Nancy Simcox, MS
Lecturer and Director of Continuing Education Programs, Department of Environmental & Occupational Health Sciences, University of Washington

Brittany Weldon, PhD
Senior Toxicologist, The Boeing Company
Affiliate Faculty, Department of Environmental & Occupational Health Sciences, University of Washington

RECOMMENDED PREREQUISITES

Material in the program is intended for individuals who have:

- A four-year degree
- At least 1 year of relevant work or graduate-level education experience
- A fundamental knowledge of chemistry, equivalent to a basic college-level chemistry course

This program is supported by the University of Washington Northwest Center for Occupational Health and Safety, Molecular Design Research Network (MoDRN), and the UW DEOHS Sustainable Technologies, Alternate Chemistry-Training and Education Center (STAC-TEC)