

**UNIVERSITY OF COLORADO-BOULDER AND WATER ENVIRONMENT FEDERATION  
WATER ENGINEERING & MANAGEMENT PROGRAM**

***Operate with Excellence: Leadership and Management Skills  
Operator Short Course (May 14 – June 6, 2024)***

**SHORT COURSE DESCRIPTION & OBJECTIVES**

**Description**

*Operate with Excellence: Leadership and Management Skills* short course is a collaboration between the University of Colorado (CU), Civil Engineering, Water Engineering & Management (WE&M) program, and Water Environment Federation (WEF). This is a community service course for water and wastewater operators. It includes 8 classes covering leadership, management, communication, utility finance, diversity & inclusion, and ethics.

The course is for operators who are either looking to advance in the future or recently advanced to a management position. *Operate with Excellence: Leadership and Management Skills* provides students with non-technical skills to successfully advance in the water industry, by providing tools you need to produce results and solve increasingly complex problems in the water profession.

The course is designed for working professionals. Courses are taught by senior water professionals, including operators. It is delivered live on CU Boulder campus with live-streamed and recorded options, allowing working operators, around the world, to begin to bridge the gaps between supervision, management, and leadership.

**Testimonial:**

*"As a newer operator, I felt that this course laid a great foundation for what areas to focus on when growing my career, as well as illuminating skills and protocols that I can fall back on when a tough decision or difficult situation arises at my plant. I recommend this course, as the course delves into several critical areas of study that are helpful when navigating planning, decision making, and interpersonal dynamics that are found at water and wastewater plants."*

-Jamie Akens, Plant Operator, Metro Water Recovery

**Objectives**

- Encourage a diverse pool of operators to bridge the gap and transition to supervisory, management, and leadership positions in the water profession.
- Continue their learning after the short course to obtain a WE&M graduate certificate and/or a MS degree from the University of Colorado.
- Through the coursework, learn to manage yourself, lead and manage diverse teams, and through successful experiences, advance to water leadership positions.

- This is a cooperative, community service activity for the University of Colorado with the Water Environment Federation.

### **Advancing Learning with the Next Steps:**

- **Water Engineering & Management Certificate**, University of Colorado:  
The WE&M certificate is another step to develop leadership, management, communication, and finance skills in the water profession. This program expands on the learning offered in the *Operate with Excellence: Leadership and Management Skills* short course. The courses will count for a future master's degree. For more information, contact: [Richard.d.kuchenrither@colorado.edu](mailto:Richard.d.kuchenrither@colorado.edu)
- **Water Engineering & Management Master's Degree**, University of Colorado:  
The WE&M master's degree provides additional technical and non-technical skills, widening skills needed for advancement in the water profession. The courses from the WE&M certificate count towards a master's degree. For more information, contact: [Richard.d.kuchenrither@colorado.edu](mailto:Richard.d.kuchenrither@colorado.edu)
- **Water Leadership Institute**, WEF  
The Water leadership Institute program is aimed at educating, training, and providing opportunities that enable developing and emerging leaders to build strong lasting relationships within the water industry. For more information, contact: [WLI@wef.org](mailto:WLI@wef.org)

### **Mentor Potential:**

*Operate with Excellence: Leadership and Management Skills* short course includes 8 distance classes broadly covering leadership, management, communication, utility finance, diversity & inclusion, and ethics, topics like those offered in the WEF Water Leadership Institute (WLI) program. WLI alums are uniquely situated to serve as 'mentors' during the course and in the three months following the series for operators interested in having a trusted advisor and mentor sounding board as part of the experience of this program.

Benefits to both include networking, sharing knowledge and experiences to benefit and grow the water sector, encourage inclusion and the opportunity to integrate operations, engineers, communicators, and others in personal and unique way.

Please fill out the [Mentor Request Form](#) by May 17, 2024, to be paired with a mentor as part of the learning experience. If you have questions, contact Jessica Rozek, [jrozek@wef.org](mailto:jrozek@wef.org).

## SPEAKERS

**Richard Kuchenrither**, Ph.D., P.E., CU Scholar in Residence

[Richard.D.Kuchenrither@colorado.edu](mailto:Richard.D.Kuchenrither@colorado.edu) | [LinkedIn](#)

**Karen Pallansch**, P.E., Retired, General Manager, Alexandria Renew Enterprise

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**Linda Kelly**, Retired, WEF Sr. Director Association Engagement and Governance

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**Dustin Hagemann**, Superintendent, Clean Water Services

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**Angela Goodman**, PE, CWP, Senior Utility Management Consultant, HDR

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**Tanya Ennis**, Ph.D., CU Director Diversity, Equity, and Inclusion in Research, Creative Work, and Innovation

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**Stacy Thompson**, Deputy Director, Saco Maine, WRRD

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**Jeff Theerman**, Senior Utility Performance Consultant, Brown & Caldwell

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**Laura Rieck**, CWP, Water Treatment Operator, Durango, Colorado (invited)

[laura.rieck@durangogov.org](mailto:laura.rieck@durangogov.org)

**Cynthia Lane**, General Manager, Platte Canyon Water & Sanitation District

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**Aaron Rice**, Maintenance Supervisor, Grand Junction, Colorado

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**CLASS MEETS: ZOOM AND UNIVERSITY OF COLORADO, ECCE 1B41**

TUESDAY, MAY 14, 21 & 28

THURSDAY, MAY 16 & 23 & 30

9:30 AM TO 11:00 AM MT

TUESDAY, JUNE 4

THURSDAY, JUNE 6

1:30 PM TO 3:00 PM MT

**COURSE READINGS**

- **Readings**

The readings are in the course portal on the WEF Learning Center, available for all registrants. Please, if you have a chance, read/review before the classes.

- **Suggested Readings**

The suggested readings are available, outside of the class readings. Highly recommend readings for more detailed information.

**SCHEDULE AND TOPICS**

**1. Tuesday 14 May 2024 (9:30-11:00 MT) | Course Introduction & Communicating with Impact**

Speakers: Dick Kuchenrither, Linda Kelly, and Dustin Hagemann

- Course Introduction
- Emotional Intelligence
- Behaviors and Personality Profiles

**Reading:**

1. *The Effective Water Professional: Leadership, Communications, Management, Finance & Governance*. Water Environment Federation. 2015. **Chapter 4. Management, Sec 5.6 A Few Words about Behavior and Personalities, p. 153-155.**

**Suggested Readings:**

1. Rohm, Robert, A. [\*Positive Personality Profiles: D-I-S-C-over Personality Insights to Understand Yourself...and Others\*](#). Voyages Press. 2005.
2. Watling, Brian. [\*DiSC – Handbook of Explanations\*](#). 2022

## 2. Thursday, 16 May 2024 (9:30-11:00 MT) | Basics of Leadership & Time Management

Speakers: Dick Kuchenrither, Karen Pallansch and Angela Goodman

- Leadership Basics, Attributes, Effectiveness
- Time Management

### Readings:

1. *The Effective Water Professional: Leadership, Communications, Management, Finance & Governance*. Water Environment Federation. 2015. **Chapter 2: Leadership.**
2. Bower, Marvin. [\*The Will to Lead: Running a Business With a Network of Leaders\*](#). Harvard Business Review Press. 1997. **Chapter 3: Developing Leaders in a Business.**

### Suggested Other Readings

1. *The Effective Water Professional: Leadership, Communications, Management, Finance & Governance*. Water Environment Federation. 2015. [Chapter 6: Utility Governance](#).
2. Covey, Stephen. [\*The Seven Habits of Highly Effective People\*](#), Habit 3, First Things First. Simon & Schuster. 2020.
3. Drucker, Peter F. [\*The Effective Executive: The Definitive Guide to Getting the Right Things Done\*](#). Harper Business. 2006.

## 3. Tuesday, 21 May 2024 (9:30-11:00 MT) | Ethics

Speakers: Dick Kuchenrither & Karen Pallansch

- Codes of Ethics
- Class exercise

### Suggested Readings:

1. Johnson, Craig E. [\*Meeting the Ethical Challenges of Leadership: Casting Light or Shadow\*](#). Sage Publishing. 2020. **Chapter 3**

## 4. Thursday, May 23, 2024 (9:30-11:00 MT) | Diversity & Inclusion

Speakers: Dick Kuchenrither, Tanya Ennis

- History/case study in the water profession
- Why is diversity, equity, and inclusion important in the water workforce
- Handling DEI issues in your workday

**Readings:**

1. Bassani, Elisa. "[The benefits of diversity in leadership and why it's important](#)" *Seenit*. 2022.
2. Jacques, Justin. "**Special Section: Workforce**" *Water Environment & Technology*. May 2022.
3. Kane, Joseph and Tomer, Adie *Renewing the Water Workforce: Improving water infrastructure and creating a pipeline to opportunity*. Brookings Institution: Metropolitan Policy Program July 2018.  
**Executive Summary.**
4. [WEF Diversity, Equity, and Inclusion webpage](#)
5. WEFTEC Live: Creating An Equitable Workforce  
[https://youtu.be/eLLO7ydUlyw?si=jWspBiG\\_os5XDgGf](https://youtu.be/eLLO7ydUlyw?si=jWspBiG_os5XDgGf)

**Suggested Readings:**

1. Livingston, Robert. "[How to Promote Racial Equity in the workforce: a 5-step plan](#)." *Harvard Business Review*. September/October 2020.
2. Kane, Joseph and Tomer, Adie [Renewing the Water Workforce: Improving water infrastructure and creating a pipeline to opportunity](#). Brookings Institution: Metropolitan Policy Program July 2018.
3. Mays, David. "[How Diversity Makes Better Engineering Teams](#)." *Journal AWWA*. September 2022.

**5. Tuesday, 28 May 2024 (9:30-11:00 MT) | Management- Strategic and Tactical Planning and How it Impacts Decision Making**

**Speakers:** Dick Kuchenrither, Jeff Theerman, & Stacy Thompson

- Strategic and Tactical Planning – interactions and differences
- Basics on Decision Making & Managing Risk

**Readings:**

1. *The Effective Water Professional: Leadership, Communications, Management, Finance & Governance*. Water Environment Federation. 2015. **Chapter 4: Management**.

**Suggested Reading:**

1. Hammond, John S., Keeney, Ralph L., Raiffa, Howard. "[The Hidden Traps in Decision Making](#)." *Harvard Business Review*. 1998.

**6. Thursday, 30 May 2024 (9:30-11:00 MT) | Management- Are you Ready to be a Supervisor?**

**Speakers:** Dick Kuchenrither, Aaron Rice, Stacy Thompson

- Why become a supervisor – opportunities and challenges
- Navigating the change from co-worker to “boss”

**Reading:**

1. Duncan, Roger Dean. “**How Good Managers Lead, How Good Leaders Manage.**” *Black and Veatch: Dialogue*.
2. Thompson, Stacy and Crandall, Stacie. “**Operator Essentials: What Every Operator Should Know About Leadership and People Management.**” *Water Environment & Technology*. December 2023.

**Suggested Reading:**

1. Watkins, Michael. "[The Big Shift: How Managers Become Leaders](#).” *Harvard Business Review*. June 2012.

**7. Tuesday, 4 June 2024 (1:30-3:00 MT) | Public Communication & Engagement**

**Speakers:** Laura Rieck and Jeff Theerman

- General Public Communication
- Principals of Crisis communication
- An Operator’s Role in Communicating about their work.

**Readings:**

1. Dunifon, Shea and Diehl, Cody. “**Operator Essentials: What Every Operator Needs to Know About Giving Public Tours.**” *Water Environment & Technology*. April 2023.
2. *The Effective Water Professional: Leadership, Communications, Management, Finance & Governance*. Water Environment Federation. 2015. **Chapter 3: Communication, Section 1.0-3.0, P.30-49.**
3. *Survival Guide: Public Communications for Media Professionals*. Water Environment Federation. 2002. **Chapter 6: Working with the Media— You Need Them and They Need You!**
4. *Wastewater Treatment Fundamentals III: Advanced Treatment*. Water Environment Federation. 2022. **Chapter 14: Leadership and Management. P.559-563, Customer Service and Public Engagement.**
5. WEFTEC Live: Group Therapy for Communicators  
<https://youtu.be/Tws4hOKiBtM?si=u7W9OgMoKqjCtkXo>
6. Media Links to Browse  
Northeast Ohio Regional Sewer District  
[CLEAN WATER FEST - Home \(weebly.com\)](https://www.cleanwaterfest.com/)  
Alexandria Renew  
[Education Center | AlexRenew](https://www.alexrenew.com/)  
Metropolitan St. Louis Sewer District  
[Home Page - Metropolitan St. Louis Sewer District \(msdprojectclear.org\)](https://www.msdpj.org/)  
King County, Washington  
<https://kingcounty.gov/services/environment/wastewater.aspx>

## 8. Thursday, 6 June 2024 (1:30-3:00 MT) | Finance Basics & Class Wrap-Up

Speakers: Cynthia Lane and Dick Kuchenrither

- Basics of Finance & Budgeting for Operators

### Readings:

1. *The Effective Water Professional: Leadership, Communications, Management, Finance & Governance*. Water Environment Federation. 2015. **Chapter 5: Utility Finance.**
2. Kyle, Michael, and Foster, Joe. “**Operator Essentials: What Every Operators Needs to Know About Budgeting.**” *Water Environment & Technology*. February 2021.



3. Kyle, Michael. **“Operator Essentials: What Every Operators Needs to Know About Financing and Funding.”** *Water Environment & Technology*. May 2023.
4. *Wastewater Treatment Fundamentals III: Advanced Treatment*. Water Environment Federation. 2022. **Chapter 14: Leadership and Management. P.531-536, Budgeting and Financial Management and P.542-546, Capital Improvements and Projects.**

**Suggested Readings:**

1. Hawkins, George S., Neiderer, Sarah. and Kricun, Andrew [“Considering Affordability Programs for Water & Wastewater Utilities.”](#) *Journal AWWA*. July/August 2022.
2. LaFrance, David. [“Price, Value, and Affordability-What if Only Half of Us Could Afford Water?”](#) *Journal AWWA*. July 2013.
3. Qureshi, Naeem and Hanson, Ryan. [“Consider Water & Sewer Rate Affordability”](#) *Opflow*. March 2019.
4. Switzer, David and Teodoro, Manuel P. [“The Color of Drinking Water: Class, Race, Ethnicity and Safe Drinking Water Act Compliance.”](#) *Journal AWWA*. September 2017.