



31st Year!



2022 UMass Water Academy: Institute in Drinking Water Treatment

August 8-10, 2022 – 3-Day Basic Course
August 11, 2022 – 1-Day Advanced Course

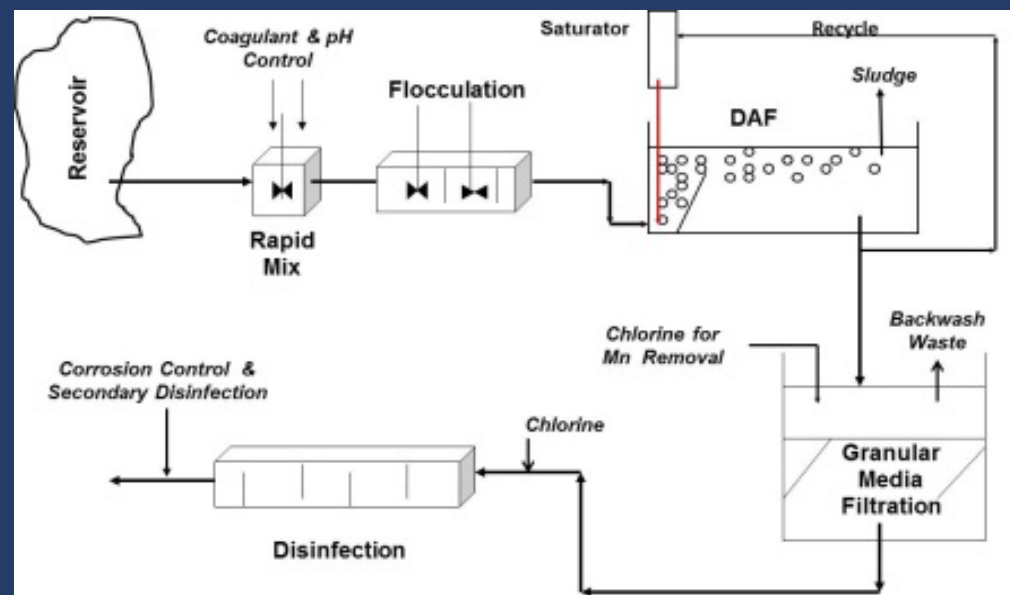
Hotel Northampton, Northampton, MA

Course objectives:

To present the fundamentals of drinking water treatment processes, new developments in drinking water treatment, apply course materials to existing and proposed drinking water requirements, and to illustrate applications of principles and practice using pilot-scale plant and full-scale plant case studies.

3-Day Basic Course Topics:

- Regulations
- Particulate Matter & Turbidity
- Organic Constituents:
 - Natural Organic Matter
 - Micropollutants
- Coagulation
- Clarification:
 - Gravity Settling
 - Dissolved Air Flotation
- Media Filtration
- MF/UF Membrane Filtration
- Air Stripping
- Ozonation
- Iron & Manganese Control
- DBPs in Distribution Systems
- Pb/Cu Chemistry & Control
- UV Disinfection & AOPs
- Measurements:
 - Chemical / Physical
- Conceptual Design
- Climate Change Impacts
- Case Studies



1-Day Advanced Course Topics:

- Types of challenging and emerging contaminants
- Options for controlling emerging contaminants
- Advanced Oxidation Processes
- Ion Exchange
- Activated Carbon Adsorption
- Saltwater chemistry
- Desalting Membrane Treatment
- Control of algal toxins and perfluorinated compounds
- Case Studies

Institute Faculty

- David A. Reckhow** — Research Professor in the Environmental and Water Resources Engineering Program at UMass Amherst with over 35 years of research and professional experience in water treatment with emphasis on natural organic matter, disinfection byproduct control and ozonation.
- John E. Tobiason, P.E.** — Civil and Environmental Engineering Department Head and Professor in the Environmental and Water Resources Engineering Program at UMass Amherst with over 35 years of research and professional experience in water treatment with emphasis on particles in water, coagulation, media and membrane filtration, and manganese control.
- Mariana Lopes** — Assistant Professor in the Environmental and Water Resources Engineering Program at UMass Amherst with research experience in drinking water quality and treatment with an emphasis on ultraviolet disinfection and biofilm prevention, light driven reactions, PFAS removal and destruction, and nano-technology enabled water treatment.



Registration

Select course and submit payment: [UMass link](#).

Registration covers course costs, course notes, coffee breaks and an evening reception. Lodging is not included. Registration deadline: July 20. Cancellations before July 7 receive full refund less \$75 cancellation fee. No refunds after this date. **Questions:** contact Institute Director, Nick Tooker at nbtooker@umass.edu.

Additional Information

Course is held from **8am-5pm daily** (day 1 evening reception for 3-day course). Reduced rate rooms available at the Hotel Northampton. Bradley International Airport, north of Hartford, CT is a one-hour drive to Northampton. Valley Transporter provides shuttle service from the airport and can be reached at: 413-253-1350 or Vt@valleytransporter.com.