



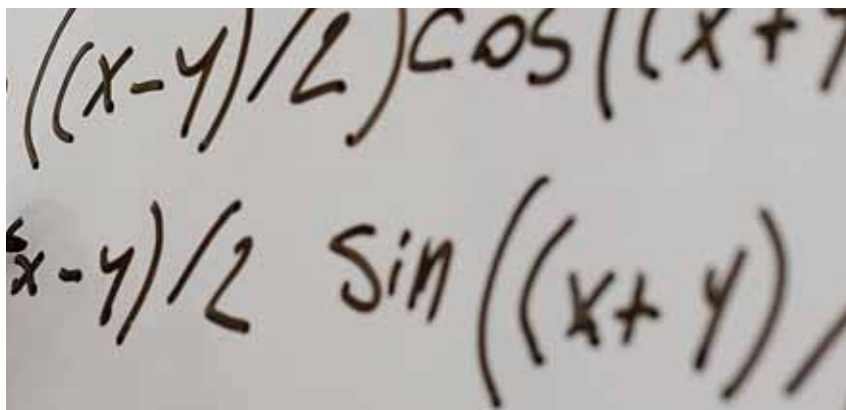
2017

CATALOG OF TRAINING

Your Educational Resource

Sponsored by the Member Education Committee

Capital Chapter | Central Chapter | Genesee Chapter
Long Island Chapter | Lower Hudson Chapter | Western Chapter



2017 Catalog of Training Sessions

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P: 315-422-7811
F: 315-422-3851



Capital Chapter Training Session

March 14 Mathematics for Water and Wastewater Operators

Instructor Charles Defazio, P.E.C.

Location Vischer Ferry Firehouse, 360 Riverview Road, Rexford, NY

Contact Hours RTC 17831-17, 6.0 Hours

ATC 152-7576-14049, 6.0 Hours

This course will serve as either an introduction to mathematics required for water and wastewater operators or as a review for more seasoned operators. This course could also be a valuable one for those preparing for operator examinations.

Course Schedule

8:00 am	Registration
8:30 am	Basic mathematics review as it pertains to working at a treatment facility; (real world/applied math or what you should know); decimals, fractions, concentrations, percent solids, understanding laboratory; results from a mathematics perspective, and basic equations
10:30 am	Break
10:45 am	Using mathematics to better understand treatment plants; calculation of unit process and unit operation organic, hydraulic and solids loadings, familiarity with standard treatment facility terms and design ranges
12:00 pm	Lunch
1:00 pm	The importance of mathematics in at a treatment facility for both process control and proper dosing and calculation of mass quantities activated sludge calculations, sludge handling, flow measurement
2:30 pm	Break
2:45 pm	Attendees participation concerning their specific facility Discussion and calculations
3:45 pm	Q & A, evaluations and wrap up
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Capital Chapter Training Session

May 18 Chlorine Disinfection Soup to Nuts: Chlorination and Dechlorination

Instructor Gary Lohse, P.E., De Nora Water Technologies

Location Vischer Ferry Firehouse, 360 Riverview Road, Rexford, NY

Contact Hours RTC 17838-17, 6.0 Hours

ATC 152-7577-14053, 6.0 Hours

PDH, 6.0 Hours

Chlorine has been used as a disinfectant in a variety of forms for many decades. This course is intended to provide a broad overview of the all aspects of the use of chlorine as a disinfectant including background and regulations as well as chemical delivery, storage, feeding, measuring, control and dechlorination for each of the various forms of chlorine readily available on the market today.

Course Schedule

8:00 am	Registration
8:30 am	Chlorine disinfection background
9:00 am	Disinfection regulations
10:00 am	Basic chlorine chemistry
10:15 am	Break
10:30 am	Basic chlorine chemistry, <i>continued</i>
11:00 am	Gaseous chlorine
11:30 am	Calcium hypochlorite
12:00 pm	Lunch
1:00 pm	Sodium hypochlorite and onsite hypochlorite generation systems
1:30 pm	Chlorine residual analyzers
2:00 pm	Chlorine control systems
2:15 pm	Break
2:30 pm	Chlorine control systems, <i>continued</i>
3:00 pm	Dechlorination systems
3:30 pm	Chlorine compounds
4:00 pm	Course summary and adjournment



P: 315-422-7811

F: 315-422-3851

Capital Chapter Training Session

November 16 Nitrogen Removal

Instructor Phil Smith, P.E., M.S.

Location Vischer Ferry Firehouse, 360 Riverview Road, Rexford, NY

Contact Hours RTC 17830-17, 6.0 Hours

PDH, 6.0 Hours

The workshop is interactive with several practical group exercises, e.g., Target Aerobic MCRT. The training covers the reactions, biochemistry, process monitoring, process control approaches, and how to troubleshoot nitrogen removal problems.

Course Schedule

8:00 am	Sign in
8:30 am	Forms of nitrogen
9:30 am	Nitrification: Fundamentals and key factors
10:30 am	Break
10:45 am	Denitrification: Fundamentals and key factors
11:30 am	Nitrification: Operating strategies
12:00 pm	Lunch
1:00 pm	Denitrification: Operating strategies
1:30 pm	Denitrification modifications case history
2:00 pm	Troubleshooting common denitrification problems
2:30 pm	Break
2:45 pm	SBR operations and troubleshooting
3:15 pm	Nitrogen removal problems
4:00 pm	Discussion, Q & A and wrap up



P: 315-422-7811

F: 315-422-3851

Central Chapter Training Session

March 8 **Confined Space Awareness**

This course is covered in part by a grant from the NYS HAB through WNYCOSH.

Instructor Nellie Brown, MS, CIH

Location Elks Lodge, Lodge #496 Home, 728 Bradley Street, Watertown, NY

Contact Hours RTC 17833-17, 6.0 Hours

ATC 152-2874-14056, 6.0 Hours

PDH, 6.0 Hours

Course Schedule

8:00 am	Registration Overview of the problem: What is a confined space? How serious is the issue? Exercise: Case History A Requirements of the standard, permit required spaces Exercise: Case History B Types of confined space hazards –Categories Exercise: Case History C
10:15 am	Break
10:30 am	Types of confined space hazards – In depth Exercise: Case History D Protection and prevention by permit entry procedures Exercise: Case History E Protection and prevention by permit entry procedures, <i>continued</i> Exercise: Case History F
12:00 pm	Lunch
1:00 pm	Morning Session, <i>continued</i> Small group exercise: Accident scenarios – identify hazards and appropriate permit program hazard control procedures
2:15 pm	Break
2:30 pm	Session, <i>continued</i> <ul style="list-style-type: none">• Rescue procedure• Basics• Small group exercise: “What do you do if ... ?”• Air monitoring basics• Small group exercise: “What’s happening here?”
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Central Chapter Training Session

September 21

Dewatering and Thickening Technologies and Polymer Optimization

Instructors

Ron Drake, Alfa Laval
Ron Bowman, Velo Dyne

Location

SUNY Polytechnic Institute, Student Center, 100 Seymor Road, Utica NY

Contact Hours

RTC 17837-17, 6.0 Hours
PDH, 6.0 Hours

This course will describe in detail how centrifuges and belt presses function and contrast the benefits and features of the two technologies. The presentation will describe the theory of dewatering, thickening, equipment components as well as equipment installation and arrangement considerations. Also discussed will be many aspects of optimizing polymer usage.

Course Schedule

8:00 am	Registration
8:30 am	Belt press dewatering Experience and sizes available; components; design features; installation/arrangement considerations
9:30 am	Centrifuge dewatering Experience and models available; theory of centrifuges – G-forces, components and how centrifuges work; design features; installation/arrangement considerations; variable process parameters animation – impact on performance results
10:15 am	Break
10:30 am	Centrifuge dewatering, <i>continued</i>
11:00 am	Comparison of dewatering technologies Space, power, water, polymer requirements; sludge cake percentages
12:00 pm	Lunch
1:00 pm	Thickening technologies Gravity Belt (similar topics as for dewatering); centrifuge thickening (similar topics as for dewatering)
2:00 pm	Optimizing polymer performance Polymer applications in water and wastewater treatment, polymer types and characteristics, storage and handling; dry and liquid polymers; optimizing the activation of polymers; comparison of polymer activation technologies; dry and liquid, components of a typical polymer system; what about aging?; understanding how to optimize polymer in your application
3:45 pm	Q&A
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Central Chapter Training Session

October 19

Mathematics for Water and Wastewater Operators

Instructor Charles Defazio, P.E.C.

Location Onondaga County Water Environment Protection, 650 Hiawatha Boulevard West, Syracuse, NY

Contact Hours RTC 17831-17, 6.0 Hours

ATC 152-7576-14051, 6.0 Hours

This course will serve as either an introduction to mathematics required for water and wastewater operators or as a review for more seasoned operators. This course could also be a valuable one for those preparing for operator examinations.

Course Schedule

8:00 am	Registration
8:30 am	Basic mathematics review as it pertains to working at a treatment facility; (real world/applied math or what you should know); decimals, fractions, concentrations, percent solids, understanding laboratory; results from a mathematics perspective, and basic equations
10:30 am	Break
10:45 am	Using mathematics to better understand treatment plants; calculation of unit process and unit operation organic, hydraulic and solids loadings, familiarity with standard treatment facility terms and design ranges
12:00 pm	Lunch
1:00 pm	The importance of mathematics in at a treatment facility for both process control and proper dosing and calculation of mass quantities activated sludge calculations, sludge handling, flow measurement
2:30 pm	Break
2:45 pm	Attendees participation concerning their specific facility Discussion and calculations
3:45 pm	Q & A, evaluations and wrap up
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Central Chapter Training Session

November 9

Innovative Treatments for Meeting Low Level Nutrient Limits

Instructors

Manuel de los Santos, Aqua Aerobics

Mark Hughes, P.E., Aqua Aerobics

Location

Chenango Town Hall, 1529 State Route 12, Binghamton NY

Contact Hours

RTC 17836-17, 6.0 Hours

PDH, 6.0 Hours

This course will cover methods of meeting the demand for lower levels of nutrients in watershed discharges, in conjunction with the growing pressure across the country to save energy and chemicals.

Course Schedule

8:00 am	Registration
8:30 am	Primary Filtration – in lieu of Primary Clarification! <ul style="list-style-type: none">• Energy conservation• Footprint• Increasing secondary treatment capacity
10:00 am	Enhanced biological nutrient removal <ul style="list-style-type: none">• Meeting low N limits• Meeting low P limits
10:30 am	Break
10:45 am	Enhanced biological nutrient removal, <i>continued</i>
11:45 am	Tertiary filtration for meeting nutrient limits <ul style="list-style-type: none">• Meeting ultra-low P limits• Usage of cloth media filtration as a tertiary treatment technology
12:00 pm	Lunch
1:00 pm	Tertiary filtration for meeting nutrient limits, <i>continued</i>
2:15 pm	Break
2:30 pm	Smart controls <ul style="list-style-type: none">• Use of intelligent-based software and on-line monitoring of process parameters
3:45 pm	Q&A
4:00 pm	Course wrap-up and course adjourned



P: 315-422-7811

F: 315-422-3851

Genesee Chapter Training Session

February 24

Mathematics for Water and Wastewater Operators

Instructor

Charles Defazio, P.E.C.

Location

Wayne County Public Safety Building, 7376 Route 31, Lyons, NY

Contact Hours

RTC 17831-17, 6.0 Hours

ATC 152-7576-14048, 6.0 Hours

This course will serve as either an introduction to mathematics required for water and wastewater operators or as a review for more seasoned operators. This course could also be a valuable one for those preparing for operator examinations.

Course Schedule

8:00 am	Registration
8:30 am	Basic mathematics review as it pertains to working at a treatment facility; (real world/applied math or what you should know); decimals, fractions, concentrations, percent solids, understanding laboratory; results from a mathematics perspective, and basic equations
10:30 am	Break
10:45 am	Using mathematics to better understand treatment plants; calculation of unit process and unit operation organic, hydraulic and solids loadings, familiarity with standard treatment facility terms and design ranges
12:00 pm	Lunch
1:00 pm	The importance of mathematics in at a treatment facility for both process control and proper dosing and calculation of mass quantities activated sludge calculations, sludge handling, flow measurement
2:30 pm	Break
2:45 pm	Attendees participation concerning their specific facility Discussion and calculations
3:45 pm	Q & A, evaluations and wrap up
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Genesee Chapter Training Session

July 21

Chlorine Disinfection Soup to Nuts: Chlorination and Dechlorination

Instructor Gary Lohse, P.E., De Nora Water Technologies

Location Civil Defense Training Facility, 13 East Pultney Square, Bath, NY

Contact Hours RTC 17838-17, 6.0 Hours

ATC 152-7577-14052, 6.0 Hours

PDH, 6.0 Hours

Chlorine has been used as a disinfectant in a variety of forms for many decades. This course is intended to provide a broad overview of the all aspects of the use of chlorine as a disinfectant including background and regulations as well as chemical delivery, storage, feeding, measuring, control and de-chlorination for each of the various forms of chlorine readily available on the market today.

Course Schedule

8:00 am	Registration
8:30 am	Chlorine disinfection background
9:00 am	Disinfection regulations
10:00 am	Basic chlorine chemistry
10:15 am	Break
10:30 am	Basic chlorine chemistry, <i>continued</i>
11:00 am	Gaseous chlorine
11:30 am	Calcium hypochlorite
12:00 pm	Lunch
1:00 pm	Sodium hypochlorite and onsite hypochlorite generation systems
1:30 pm	Chlorine residual analyzers
2:00 pm	Chlorine control systems
2:15 pm	Break
2:30 pm	Chlorine control systems, <i>continued</i>
3:00 pm	Dechlorination systems
3:30 pm	Chlorine compounds
4:00 pm	Course summary and adjournment



P: 315-422-7811

F: 315-422-3851

Genesee Chapter Training Session

November 3

Innovative Treatments for Meeting Low Level Nutrient Limits

Instructors

Manuel de los Santos, Aqua Aerobics

Mark Hughes, P.E., Aqua Aerobics

Location

Van Lare Plant Training Room, 1574 Lake Shore Boulevard, Rochester, NY

Contact Hours

RTC 17836-17, 6.0 Hours

PDH, 6.0 Hours

This course will cover methods of meeting the demand for lower levels of nutrients in watershed discharges, in conjunction with the growing pressure across the country to save energy and chemicals.

Course Schedule

8:00 am	Registration
8:30 am	Primary Filtration – in lieu of Primary Clarification! <ul style="list-style-type: none">• Energy conservation• Footprint• Increasing secondary treatment capacity
10:00 am	Enhanced biological nutrient removal <ul style="list-style-type: none">• Meeting low N limits• Meeting low P limits
10:30 am	Break
10:45 am	Enhanced biological nutrient removal, <i>continued</i>
11:45 am	Tertiary filtration for meeting nutrient limits <ul style="list-style-type: none">• Meeting ultra-low P limits• Usage of cloth media filtration as a tertiary treatment technology
12:00 pm	Lunch
1:00 pm	Tertiary filtration for meeting nutrient limits, <i>continued</i>
2:15 pm	Break
2:30 pm	Smart controls <ul style="list-style-type: none">• Use of intelligent-based software and on-line monitoring of process parameters
3:45 pm	Q&A
4:00 pm	Course wrap-up and class adjourned



P: 315-422-7811

F: 315-422-3851

Long Island Chapter Training Session

March 2

SPDES Compliance and Enforcement, Electronic Reporting and SPRTK Regulatory

Instructors

Robert Wither, P.E., NYS DEC and other DEC Staff

Location

Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY

Contact Hours

RTC 17834-17, 6.0 Hours

PDH, 1.5 Hours

Attendees will be able to discuss the regulatory requirements of the Sewage Pollution Right to Know Law (SPRTK) and how to submit a sewage overflow or bypass report using the NY-Alert system.

Attendees completing the second session of the day will be able to discuss EPA's Electronic Reporting Rule requirements and how New York will meet these requirements for Discharge Monitoring Reports (DMRs) using EPA's electronic DMR reporting tool, NetDMR.

The final session will provide attendees with an overview of New York's SPDES compliance and enforcement procedures, how New York uses these procedures to meet EPA requirements and, how they impact a SPDES-permitted facility.

Course Schedule

8:00 am	Registration
8:30 am	Welcome and introduction
8:40 am	SPRTK Regulatory requirements and using NY-Alert <ul style="list-style-type: none">• Regulatory requirements• Reporting tips and common problems• Summary of reports
10:30 am	Break
10:45 am	Electronic DMRs (NetDMR) <ul style="list-style-type: none">• EPA electronic reporting rule• Using NetDMR• Non-compliance report too
12:00 pm	Lunch
1:00 pm	Electronic DMRs/Overview SPDES compliance and enforcement
2:30 pm	Break
2:45 pm	Overview SPDES compliance and enforcement <ul style="list-style-type: none">• Permit/Schedule violation• Types of enforcement actions and use• Non-filer enforcement
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Long Island Chapter Training Session

April 6 Mathematics for Water and Wastewater Operators

Instructor Charles Defazio, P.E.C.

Location Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY

Contact Hours RTC 17831-17, 6.0 Hours

ATC 152-7576-14050, 6.0 Hours

This course will serve as either an introduction to mathematics required for water and wastewater operators or as a review for more seasoned operators. This course could also be a valuable one for those preparing for operator examinations.

Course Schedule

8:00 am	Registration
8:30 am	Basic mathematics review as it pertains to working at a treatment facility; (real world/applied math or what you should know); decimals, fractions, concentrations, percent solids, understanding laboratory; results from a mathematics perspective, and basic equations
10:30 am	Break
10:45 am	Using mathematics to better understand treatment plants; calculation of unit process and unit operation organic, hydraulic and solids loadings, familiarity with standard treatment facility terms and design ranges
12:00 pm	Lunch
1:00 pm	The importance of mathematics in at a treatment facility for both process control and proper dosing and calculation of mass quantities activated sludge calculations, sludge handling, flow measurement
2:30 pm	Break
2:45 pm	Attendees participation concerning their specific facility Discussion and calculations
3:45 pm	Q & A, evaluations and wrap up
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Long Island Chapter Training Session

October 19

Innovative Treatments for Meeting Low Level Nutrient Limits

Instructors

Manuel de los Santos, Aqua Aerobics

Mark Hughes, P.E., Aqua Aerobics

Location

Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY

Contact Hours

RTC 17836-17, 6.0 Hours

PDH, 6.0 Hours

This course will cover methods of meeting the demand for lower levels of nutrients in watershed discharges, in conjunction with the growing pressure across the country to save energy and chemicals.

Course Schedule

8:00 am	Registration
8:30 am	Primary Filtration – in lieu of Primary Clarification! <ul style="list-style-type: none">• Energy conservation• Footprint• Increasing secondary treatment capacity
10:00 am	Enhanced biological nutrient removal <ul style="list-style-type: none">• Meeting low N limits• Meeting low P limits
10:30 am	Break
10:45 am	Enhanced biological nutrient removal, <i>continued</i>
11:45 am	Tertiary filtration for meeting nutrient limits <ul style="list-style-type: none">• Meeting ultra-low P limits• Usage of cloth media filtration as a tertiary treatment technology
12:00 pm	Lunch
1:00 pm	Tertiary filtration for meeting nutrient limits, <i>continued</i>
2:15 pm	Break
2:30 pm	Smart controls <ul style="list-style-type: none">• Use of intelligent-based software and on-line monitoring of process parameters
3:45 pm	Q&A
4:00 pm	Course wrap-up and class adjourn



NYWEA
LEADING THE WAY IN
WATER QUALITY MANAGEMENT

P: 315-422-7811

F: 315-422-3851

Lower Hudson Chapter Training Session

April 6 Fundamentals of Wastewater Asset Management

Instructor Timothy Taber, P.E., BCEE

Location Wallkill Golf, 40 Sands Road, Middletown, NY

Contact Hours RTC 17832-17, 6.0 Hours

ATC 152-6732-14054, 6.0 Hours

PDH, 6.0 Hours

At the conclusion of this workshop, attendees should be able to:

1. Prepare a simple but complete Asset Management Plan;
2. Organize and execute an asset management program at a basic level consistent with best practices;
3. Develop and execute a basic Asset Management Improvement Plan that guides the strengthening of identified weaknesses in an organization's approach to asset management.

Course Schedule

8:00 am	Registration
8:30 am	Introduction to Asset Management <ul style="list-style-type: none">• The five core questions• Implementation process
9:15 am	Develop asset inventory
10:15 am	Break (15 minutes)
10:30 am	Assess condition, performance, failure modes
11:00 am	Gauge asset life and value
11:30 am	Set target level of service
12:00 pm	Lunch
1:00 pm	Determine risk (criticality)
1:30 pm	Optimize operation and maintenance decisions
2:00 pm	Develop capital improvement program
2:30 pm	Determine funding requirements
2:45 pm	Break (15 minutes)
3:00 pm	Develop asset management plan
3:30 pm	Case studies of WWTP asset management plans in New York State / Discussion
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Lower Hudson Chapter Training Session

June 14 Solids Handling and Dewatering

Instructors Dan Fronhauser, P.E., BDP
Peter Radosta, P.E., Koester Associates

Location IBM East Fishkill, 2070 Route 52, Hopewell Junction, NY

Contact Hours RTC 17835-17, 6.0 Hours
PDH, 6.0 Hours

Attendees of this training session can expect to gain knowledge and understanding of solids handling and dewatering practices, including aerobic digestion, anaerobic digestion, mechanical dewatering, and alternate dewatering methodologies. Specific topics include: design and operational considerations for aerobic and anaerobic digestion; design of gravity, pressure, and centrifugal dewatering; operations and maintenance information; dewatering process optimization; sludge conditioning; cake conveyance and sludge feed pumping. Emphasis will be placed on energy-saving systems.

The session is formatted to be valuable for design engineers, wastewater facility operators and facility managers.

Course Schedule

8:00 am	Registration
8:30 am	Introductions and outline of session
8:40 am	Overview of aerobic and anaerobic digester design
9:55 am	Networking break
10:10 am	Mechanical dewatering design and process optimization
12:00 pm	Lunch
12:45 pm	Mechanical dewatering design and process optimization
1:10 pm	Dewatering systems: Sludge feed pumping Conditioning Conveyance
2:35 pm	Networking break
2:50 pm	Energy savings and recovery systems
3:50 pm	Session wrap up and Q&A
4:00 pm	Course adjourned



P: 315-422-7811
F: 315-422-3851

Lower Hudson Chapter Training Session

October 25

Nitrogen Removal

Instructor

Phil Smith, P.E., M.S.

Location

Monticello Firehouse, 23 Richardson Avenue, Monticello, NY

Contact Hours

RTC 17830-17, 6.0 Hours

PDH, 6.0 Hours

The workshop is interactive with several practical group exercises, e.g., Target Aerobic MCRT. The training covers the reactions, biochemistry, process monitoring, process control approaches, and how to troubleshoot nitrogen removal problems.

Course Schedule

8:00 am	Sign in
8:30 am	Forms of nitrogen
9:30 am	Nitrification: Fundamentals and key factors
10:30 am	Break
10:45 am	Denitrification: Fundamentals and key factors
11:30 am	Nitrification: Operating strategies
12:00 pm	Lunch
1:00 pm	Denitrification: Operating strategies
1:30 pm	Denitrification modifications case history
2:00 pm	Troubleshooting common denitrification problems
2:30 pm	Break
2:45 pm	SBR operations and troubleshooting
3:15 pm	Nitrogen removal problems
4:00 pm	Discussion, Q & A and wrap up



P: 315-422-7811

F: 315-422-3851

Lower Hudson Chapter Training Session

November 8

Mathematics for Water and Wastewater Operators

Instructor

Charles Defazio, P.E.C.

Location

New Rochelle WWTP, 1 le Fevres Lane, New Rochelle, NY

Contact Hours

RTC 17831-17, 6.0 Hours

ATC 152-7576-14057, 6.0 Hours

This course will serve as either an introduction to mathematics required for water and wastewater operators or as a review for more seasoned operators. This course could also be a valuable one for those preparing for operator examinations.

Course Schedule

8:00 am	Registration
8:30 am	Basic mathematics review as it pertains to working at a treatment facility; (real world/applied math or what you should know); decimals, fractions, concentrations, percent solids, understanding laboratory; results from a mathematics perspective, and basic equations
10:30 am	Break
10:45 am	Using mathematics to better understand treatment plants; calculation of unit process and unit operation organic, hydraulic and solids loadings, familiarity with standard treatment facility terms and design ranges
12:00 pm	Lunch
1:00 pm	The importance of mathematics in at a treatment facility for both process control and proper dosing and calculation of mass quantities activated sludge calculations, sludge handling, flow measurement
2:30 pm	Break
2:45 pm	Attendees participation concerning their specific facility Discussion and calculations
3:45 pm	Q & A, evaluations and wrap up
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Western Chapter Training Session

January 11

Mathematics for Water and Wastewater Operators

Instructor

Charles Defazio, P.E.C.

Location

Protocol Restaurant, 6766 Transit Road, Williamsville, NY

Contact Hours

RTC 17831-17, 6.0 Hours

ATC 152-7576-14047, 6.0 Hours

This course will serve as either an introduction to mathematics required for water and wastewater operators or as a review for more seasoned operators. This course could also be a valuable one for those preparing for operator examinations.

Course Schedule

8:00 am	Registration
8:30 am	Basic mathematics review as it pertains to working at a treatment facility; (real world/applied math or what you should know); decimals, fractions, concentrations, percent solids, understanding laboratory; results from a mathematics perspective, and basic equations
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2:30 pm	Break
2:45 pm	Attendees participation concerning their specific facility Discussion and calculations
3:45 pm	Q & A, evaluations and wrap up
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Western Chapter Training Session

July 13

Dewatering and Thickening Technologies and Polymer Optimization

Instructors

Ron Drake, Alfa Laval
Ron Bowman, Velo Dyne

Location

Fredonia Technology Incubator, 214 Central Avenue, Dunkirk, NY

Contact Hours

RTC 178387-17, 6.0 Hours
PDH, 6.0 Hours

This course will describe in detail how centrifuges and belt presses function and contrast the benefits and features of the two technologies. The presentation will describe the theory of dewatering, thickening, equipment components as well as equipment installation and arrangement considerations. Also discussed will be many aspects of optimizing polymer usage.

Course Schedule

8:00 am	Registration
8:30 am	Belt press dewatering Experience and sizes available; components; design features; installation/arrangement considerations
9:30 am	Centrifuge dewatering Experience and models available; theory of centrifuges – G-forces, components and how centrifuges work; design features; installation/arrangement considerations; variable process parameters animation – impact on performance results
10:15 am	Break
10:30 am	Centrifuge dewatering, <i>continued</i>
11:00 am	Comparison of dewatering technologies Space, power, water, polymer requirements; sludge cake percentages
12:00 pm	Lunch
1:00 pm	Thickening technologies Gravity Belt (similar topics as for dewatering); centrifuge thickening (similar topics as for dewatering)
2:00 pm	Optimizing polymer performance Polymer applications in water and wastewater treatment, polymer types and characteristics, storage and handling; dry and liquid polymers; optimizing the activation of polymers; comparison of polymer activation technologies; dry and liquid, components of a typical polymer system; what about aging?; understanding how to optimize polymer in your application
3:45 pm	Q&A
4:00 pm	Course adjourned



P: 315-422-7811
F: 315-422-3851

Western Chapter Training Session

November 16

Fundamentals of Wastewater Asset Management

Instructor Timothy Taber, P.E., BCEE

Location Niagara County Fire Training Center, 5574 Niagara Street Extension, Lockport, NY

Contact Hours RTC 17832-17, 6.0 Hours

ATC 152-6732-14055, 6.0 Hours

PDH, 6.0 Hours

At the conclusion of this workshop, attendees should be able to:

1. Prepare a simple but complete Asset Management Plan;
2. Organize and execute an asset management program at a basic level consistent with best practices;
3. Develop and execute a basic Asset Management Improvement Plan that guides the strengthening of identified weaknesses in an organization's approach to asset management.

Course Schedule

8:00 am	Registration
8:30 am	Introduction to Asset Management <ul style="list-style-type: none">• The five core questions• Implementation process
9:15 am	Develop asset inventory
10:15 am	Break (15 minutes)
10:30 am	Assess condition, performance, failure modes
11:00 am	Gauge asset life and value
11:30 am	Set target level of service
12:00 pm	Lunch
1:00 pm	Determine risk (criticality)
1:30 pm	Optimize operation and maintenance decisions
2:00 pm	Develop capital improvement program
2:30 pm	Determine funding requirements
2:45 pm	Break (15 minutes)
3:00 pm	Develop asset management plan
3:30 pm	Case studies of WWTP asset management plans in New York State / Discussion
4:00 pm	Course adjourned



P: 315-422-7811

F: 315-422-3851

Locations of Training Sessions

CAPITAL CHAPTER

- **Vischer Ferry Firehouse**
360 Riverview Road, Rexford, NY

CENTRAL CHAPTER

- **Elks Lodge Watertown**
Lodge #496 Home, 728 Bradley Street, Watertown, NY
- **SUNY Polytechnic Institute**
Student Center, 100 Seymor Road, Utica NY
- **Onondaga County Water Environment Protection**
650 Hiawatha Boulevard West, Syracuse, NY
- **Chenango Town Hall**
1529 State Route 12, Binghamton NY

GENESEE CHAPTER

- **Wayne County Public Safety Building**
7376 Route 31, Lyons, NY
- **Civil Defense Training Facility**
13 East Pultney Square, Bath, NY
- **Van Lare Plant Training Room**
1574 Lake Shore Boulevard, Rochester, NY

LONG ISLAND CHAPTER

- **Bergen Point Wastewater Plant**
Southwest Sewer District #3, 600 Bergen Avenue, Babylon, NY

LOWER HUDSON CHAPTER

- **Wallkill Golf Club**
40 Sands Road, Middletown, NY
- **IBM East Fishkill**
2070 Route 52, Hopewell Junction, NY
- **Monticello Firehouse**
23 Richardson Avenue, Monticello, NY
- **New Rochelle WWTP**
1 le Fevres Lane, New Rochelle, NY

WESTERN CHAPTER

- **Fredonia Technology Incubator**
214 Central Avenue, Dunkirk, NY
- **Niagara County Fire Training Center**
5574 Niagara Street Extension, Lockport, NY
- **Protocol Restaurant**
6766 Transit Road, Williamsville, NY

LOGISTICS

Registration confirmation, directions and other pertinent information will be mailed or e-mailed to the address on the registration form one week prior to each workshop.

Cancellations must be received 10 days in advance of event. Refunds are subject to a \$20 administrative fee.



NYWEA
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Faculty and Course Titles

Nitrogen Removal

Phil Smith, P.E., M.S., Phil Smith Consulting, LLC

Confined Space Awareness

Nellie J. Brown, MS, CIH, Director of Workplace Health and Safety Programs
for the Worker Institute at Cornell University's School of Industrial and Labor Relations, Ithaca, NY

State Pollution Discharge Elimination Systems (SPDES) Compliance and Enforcement, Electronic Reporting and Sewage Pollution Right to Know (SPRTK) Regulatory

Robert Wither, P.E., NYS DEC
Staff, NYS DEC

Fundamentals of Wastewater Asset Management

Timothy Taber, P.E., BCEE

Solids Handling and Dewatering

Dan Fronhauser, P.E., BDP
Peter Radosta, P.E., Koester Associates

Mathematics for Water and Wastewater Operators

Charles Defazio, P.E.

Chlorine Disinfection Soup to Nuts: Chlorination and Dechlorination

Gary Lohse, P.E., De Nora Water Technologies

Dewatering and Thickening Technologies and Polymer Optimization

Ron Drake, Alfa Laval
Ron Bowman, Velo Dyne

Innovative Treatments for Meeting Low Level Nutrient Limits

Manuel de los Santos, Aqua Aerobics
Mark Hughes, P.E., Aqua Aerobics



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NYWEA MEC 2017 Training Calendar

DATE	CHAPTER	SESSION / LOCATION
January 11, 2017	Western	Mathematics for Water and Wastewater Operators Protocol Restaurant, 6766 Transit Road, Williamsville, NY
February 6–8, 2017	NYWEA	89th Annual Meeting New York City Marriott Marquis
February 24, 2017	Genesee	Mathematics for Water and Wastewater Operators Wayne County Public Safety Building, 7376 Route 31, Lyons, NY
March 2, 2017	Long Island	SPDES Compliance & Enforcement, Electronic Reporting & SPRTK Regulatory Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY
March 8, 2017	Central	Confined Space Awareness Elks Lodge, Lodge #496 Home, 728 Bradley Street, Watertown, NY
March 14, 2017	Capital	Mathematics for Water and Wastewater Operators Vischer Ferry Firehouse, 360 Riverview Road, Rexford, NY
April 6, 2017	Lower Hudson	Fundamentals of Wastewater Asset Management Wallkill Golf, 40 Sands Road, Middletown, NY
April 6, 2017	Long Island	Mathematics for Water and Wastewater Operators Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY
May 18, 2017	Capital	Chlorine Disinfection Soup to Nuts: Chlorination and Dechlorination Vischer Ferry Firehouse, 360 Riverview Road, Rexford, NY
June 5–8, 2017	NYWEA	Spring Technical Conference & Exhibition Hyatt, Rochester, NY
June 14, 2017	Lower Hudson	Solids Handling and Dewatering IBM East Fishkill, 2070 Route 52, Hopewell Junction, NY
July 13, 2017	Western	Dewatering and Thickening Technologies and Polymer Optimization Fredonia Technology Incubator, 214 Central Avenue, Dunkirk, NY
July 21, 2017	Genesee	Chlorine Disinfection Soup to Nuts: Chlorination and Dechlorination Civil Defense Training Facility, 3 East Pultney Square, Bath, NY
September 21, 2017	Central	Dewatering and Thickening Technologies and Polymer Optimization SUNY Polytechnic Institute, Student Center, 100 Seymor Road, Utica NY
October 19, 2017	Central	Mathematics for Water and Wastewater Operators Onondaga County Water Environment Protection 650 Hiawatha Boulevard West, Syracuse, NY
October 19, 2017	Long Island	Innovative Treatments for Meeting Low Level Nutrient Limits Bergen Point WWTP, 600 Bergen Avenue, Babylon, NY
October 25, 2017	Lower Hudson	Nitrogen Removal Monticello Firehouse, 23 Richardson Avenue, Monticello, NY
November 3, 2017	Genesee	Innovative Treatments for Meeting Low Level Nutrient Limits Van Lare Plant Training Room, 1574 Lake Shore Boulevard, Rochester, NY
November 8, 2017	Lower Hudson	Mathematics for Water and Wastewater Operators New Rochelle WWTP, 1 le Fevres Lane, New Rochelle, NY
November 9, 2017	Central	Innovative Treatments for Meeting Low Level Nutrient Limits Chenango Town Hall, 1529 State Route 12, Binghamton NY
November 16, 2017	Capital	Nitrogen Removal Vischer Ferry Firehouse, 360 Riverview Road, Rexford, NY
November 16, 2017	Western	Fundamentals of Wastewater Asset Management Niagara City Fire Training Center, 5574 Niagara Street Ext., Lockport, NY

525 Plum Street, Suite 102, Syracuse, NY 13204 • P: 315 422-7811 • F: 315 422-3851

TRAINING SESSIONS REGISTRATION | PLEASE PRINT. ONE FORM COMPLETED PER INDIVIDUAL.

Name _____ NYWEA Member Yes No
[Non-member registration includes 1-year Affiliate Membership.]
 Certificate/License # _____ Wastewater Water Professional Engineer
 Company / Affiliation _____
 Mailing Address _____ City _____ State _____ Zip _____
 Home Address Business Address (Email or mail confirmations with directions will be sent 1 week prior to event.)
 Phone (_____) _____ - _____ Email (required) _____

DATE	2017 SEMINAR TITLE	MEMBER	NON-MEMBER	TOTAL
Capital Chapter Training Sessions				
<input type="checkbox"/> March 14, 2017	Mathematics for Water and Wastewater Operators	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> May 18, 2017	Chlorine Disinfection Soup to Nuts	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> November 16, 2017	Nitrogen Removal	\$60.00	\$140.00	\$ _____
Central Chapter Training Sessions				
<input type="checkbox"/> March 8, 2017	Confined Space Awareness**	\$40.00	\$40.00	\$ _____
<input type="checkbox"/> September 21, 2017	Dewatering & Thickening Technologies and Polymer Optimization	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> October 19, 2017	Mathematics for Water and Wastewater Operators	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> November 9, 2017	Innovative Treatments for Meeting Low Level Nutrient Limits	\$60.00	\$140.00	\$ _____
Genesee Chapter Training Sessions				
<input type="checkbox"/> February 24, 2017	Mathematics for Water and Wastewater Operators	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> July 21, 2017	Chlorine Disinfection Soup to Nuts	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> November 3, 2017	Innovative Treatments for Meeting Low Level Nutrient Limits	\$60.00	\$140.00	\$ _____
Long Island Chapter Training Sessions				
<input type="checkbox"/> March 2, 2017	SPDES Compliance/Enforcement, NetDMR, SPRTK Regulatory	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> April 6, 2017	Mathematics for Water and Wastewater Operators	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> October 19, 2017	Innovative Treatments for Meeting Low Level Nutrient Limits	\$60.00	\$140.00	\$ _____
Lower Hudson Chapter Training Sessions				
<input type="checkbox"/> April 6, 2017	Fundamentals of Wastewater Asset Management	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> June 14, 2017	Solids Handling and Dewatering	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> October 25, 2017	Nitrogen Removal	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> November 8, 2017	Mathematics for Water and Wastewater Operators	\$60.00	\$140.00	\$ _____
Western Chapter Training Sessions				
<input type="checkbox"/> January 11, 2017	Mathematics for Water and Wastewater Operators	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> July 13, 2017	Dewatering & Thickening Technologies and Polymer Optimization	\$60.00	\$140.00	\$ _____
<input type="checkbox"/> November 16, 2017	Fundamentals of Wastewater Asset Management	\$60.00	\$140.00	\$ _____
TOTAL				\$ _____

PLEASE FILL OUT PAYMENT INFORMATION: (mail to NYWEA, or fax to 315-422-3851)

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Date _____ Authorized Signature _____



Please make checks payable to: NYWEA, Inc., mail to NYWEA, Inc., 525 Plum Street, Suite 102, Syracuse, New York 13204, or fax to 315-422-3851