

Ohio Sanitarian Registration Board
March 10, 2010
10 a.m.
77 South High Street, 19th Floor, Room 1918
Columbus, Ohio 43215

1. Call to Order
2. Approval of the Minutes
Action Required
3. Committee Reports
 - 3.1. Executive: Linda Aller, Richard Setty, Roger Suppes
 - 3.2. Professional: James Adams, Richard Setty
 - 3.3. Continuing Education: James Adams, Duane Snyder
 - 3.4. Examination: Linda Aller, Gary Silverman
 - 3.5. Finance: Gary Silverman, Roger Suppes
 - 3.6. Rules: Richard Setty, Roger Suppes
4. Executive Secretary Report
 - 4.1. Revenue and Expenditure Report
 - 4.2. Complaint 2010-C-01
5. Assistant Attorney General Report
6. Adjudication
 - 6.1. K. Craig (11 a.m.)
Action Required
7. Old Business
8. New Business
9. Continuing Education
 - 9.1. Request for Approval of Hours – Individuals (CE-2)
Action Required
 - 9.2. Request for Approval of Training Agency Status (CE-3)
Action Required
 - 9.3. Request for Approval of Hours – Training Agencies (CE-4)
Action Required
10. Applications
 - 10.1. Sanitarian-in-Training Applications
Action Required
 - 10.2. Applications for Advancement to Registered Sanitarian
Action Required
 - 10.3. Registered Sanitarian Applications
Action Required
 - 10.4. Reinstatements
Action Required

10.5. Extension/Waiver Requests

Action Required

11. Guest Participation

12. Correspondence

12.1. Gerald Vallee, M.D.: On behalf of Gregory Spear, Dr. Vallee is appealing Mr. Spear's examination score of 69% on the November 18, 2009 examination.

13. Announcements

14. Future Meeting Dates

- May 12, 2010
- July 14, 2010
- September 8, 2010
- November 10, 2010

15. Adjournment

Sanitarian Registration Board
Board Meeting Roster
March 10, 2010

James Adams


Signature

Linda Aller, Vice Chairperson


Signature

Laura Kramer Kuns


Signature

Richard Setty, Chairperson


Signature

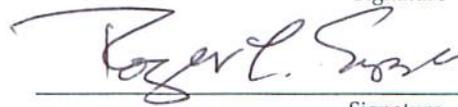
Gary Silverman


Signature

Duane Snyder


Signature

Roger Suppes, Secretary


Signature

Board Staff

W. Scott Myers, *Assistant Attorney General*


Signature

Stephanie Youst, *Executive Secretary*


Signature

Guests

Daniel S. Chatfield

Print Name

Daniel S Chatfield

Sign Name

Richard T. Miller II

Print Name

~~Richard T Miller II~~

Sign Name

MARTI BLUMLING

Print Name

Marti Blumling

Sign Name

Print Name

Sign Name



Sanitarian Registration Board

March 10, 2010

Room 1918

10:48 a.m.

Members Present

James Adams, R.S.
Linda Aller, R.S.
Laura Kramer Kuns, R.S.
Richard Setty, R.S.
Duane Snyder, R.S.
Roger Suppes, R.S.

Staff

Stephanie Youst, Executive Secretary

Legal Council

W. Scott Myers, Assistant Attorney General

Members Absent

Gary Silverman, R.S.

Call to Order

Richard Setty, Chairperson, called the meeting to order at 10:48 a.m.

Approval of Minutes

James Adams moved to approve the January 27, 2010 meeting minutes as submitted. Roger Suppes seconded the motion. The motion carried.

New Member Introduction

- Laura Kramer Kuns, an employee of the Lake County General Health District, was appointed to the Board for a term beginning March 5, 2010 and ending August 14, 2012. Ms. Kramer Kuns replaces Angela Townsend whose term expired August 15, 2009.
- The Board appointed Ms. Kramer Kuns to the continuing education and rules committees.

Executive Secretary Report

- The Executive Secretary informed the Board that expiration notices had been mailed on February 1, 2010 to 127 registered sanitarians and 25 sanitarians in training.
- The Executive Secretary informed the Board that she received the examination scores from the February 16, 2010 examination on March 8, 2010. The examination score results memo was included in the meeting packets.
- The formal written and budgetary reports are attached to the minutes for reference.

Adjudication

Kevin D. Craig

- The Board held a hearing in the matter of Kevin D. Craig.
Action: James Adams moved to deny the application for Kevin D. Craig to be registered as a sanitarian in training. Roger Suppes seconded the motion. The motion carried.

Assistant Attorney General's Report

- Scott Myers had no formal report for the Board.

Continuing Education

Individual Continuing Education Requests for Approval

Action: Duane Snyder moved to approve all individual applications for continuing education approval with the following exceptions listed below. James Adams seconded the motion. The motion carried. The approved list is attached to the minutes for reference.

476: 13.25 Hours

Requests for Approval as a Training Agency

Action: Duane Snyder moved to approve the Preble County Health District as an approved training agency. James Adams seconded the motion. The motion carried.

Approved Training Agency Requests for Course Approval

Action: Duane Snyder moved to approve all training agency requests for continuing education credit with the following exceptions listed below. James Adams seconded the motion. The motion carried. The approved list is attached to the minutes for reference.

10-161: Denied
10-212: 6.5 Hours
10-217: Denied

Applications

Sanitarian in Training Applications

Action: Linda Aller moved to approve the following applicants for sanitarian in training registration. Laura Kramer Kuns seconded the motion. The motion carried.

Chad M. Keller
Dustin J. Sutherland

Scott W. Washburn

Action: Linda Aller moved that the Board request additional information on the application for Rachel L. Bissett. Roger Suppes seconded the motion. The motion carried.

Registered Sanitarian Advancement Applications

Action: Linda Aller moved to approve the following individuals for advancement to registered sanitarian. Roger Suppes seconded the motion. The motion carried.

Nathan J. Overholt

Registered Sanitarian Applications

Action: Linda Aller moved to approve the following individuals for registration as a sanitarian. Roger Suppes seconded the motion. The motion carried.

Mone S. Whatley
Valencia S. White

Registered Sanitarian Reinstatement Applications

Action: Linda Aller moved to approve the following individuals for reinstatement as a registered sanitarian. Roger Suppes seconded the motion. The motion carried.

Rowland Anaba
Bruce Baldinger
Virginia Meacham
Richard Miller II

Ed Newman
Anthony Stout
Jack Wilson

Sanitarian in Training Reinstatement Applications

Action: Linda Aller moved to propose to deny the sanitarian in training reinstatement application for Joseph Wolf for failure to meet the mandatory continuing education requirement. James Adams seconded the motion. The motion carried.

Extension Requests

Action: Linda Aller moved to approve an extension request for G. Matthew Chokreff's sanitarian in training registration renewal until 10/19/2010. James Adams seconded the motion. The motion carried.

Waiver Requests

Action: Roger Suppes moved to deny the waiver request for Karla Siegle. Laura Kramer Kuns seconded the motion. Laura Kramer Kuns and Roger Suppes voted in favor of the motion. James Adams, Linda Aller, and Duane Snyder opposed the motion. The motion failed in 3:2 vote.

Action: James Adams moved to grant the waiver request for Karla Siegel. Linda Aller seconded the motion. James Adams, Linda Aller, and Duane Snyder voted in favor of the motion. Laura Kramer Kuns and Roger Suppes opposed the motion. The motion carried with a 3:2 vote.

Correspondence

Gerald E. Vallee, M.D.: On behalf of Gregory Spear, Dr. Vallee appealed Mr. Spear's examination score of 69% on the November 18, 2009 PES examination. **Action:** In accordance with rule 4736-9-03 of the Ohio Administrative Code, the Board requires a minimum passing score of 70.0% on the PES examination. The Board contracts with PES to provide and grade the examination given to all applicants. Should Mr. Spear wish to have his examination rescored by hand, he needs to contact PES directly at 475 Riverside Drive, New York, New York, 10115-0089. This process must be initiated by Mr. Spear via written request sent directly to PES along with a \$50.00 fee. The fee must be in the form of either a cashier's check or money order made payable to PES. Personal checks are not accepted. PES does not offer performance feedback reports on this particular examination. The only breakdown that is available regarding Mr. Spear's performance is the breakdown he received in the examination score letter from the Board.

Executive Session

Action: James Adams moved to go into executive session at 12:25 p.m. for the purposes of discussing an ongoing investigation. Linda Aller seconded the motion. Scott Myers and Stephanie Youst were asked to remain in the meeting for the executive session.

Roll Call Vote

James Adams:	Present
Linda Aller:	Present
Laura Kramer Kuns:	Present
Richard Setty:	Present
Gary Silverman:	Absent
Duane Snyder:	Present
Roger Suppes:	Present

The Board came out of executive session at 12:38 p.m.

Action: James Adams moved to issue a notice of opportunity for hearing in case number 2010-C-01 for falsifying any record, report, or other instrument in pursuing the practice of environmental health science as a registrant and disregarding, allowing, promoting, or advocating the continued violation of any substantive provision of any public health, safety, or environmental health law, rule, regulation, or ordinance of the United States, this state, any county, any township or any municipality for which the registrant has responsibility or comes within the practice of environmental health science; based upon Ohio Revised Code Chapter 4736.13 and Ohio Administrative Code rule 4736-13-01(B)(1) and 4736-13-01(B)(6). Roger Suppes seconded the motion. The motion carried.

Future Meeting Dates

The following meeting dates were confirmed by the Board:

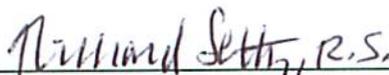
May 12, 2010
July 14, 2010

September 8, 2010
November 10, 2010

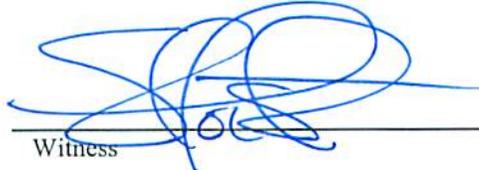
Adjournment

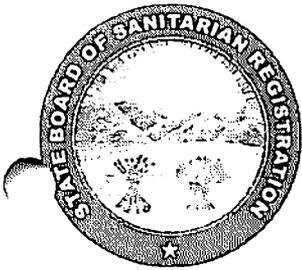
The meeting adjourned at 12:50 p.m.

Respectfully submitted
Stephanie K. Youst


Richard Setty, R.S., Chairperson

RS:sky


Witness



Ohio State Board of Sanitarian Registration
77 South High Street, 16th Floor
Columbus, Ohio 43215-6108

Governor
Ted Strickland
Executive Secretary
Stephanie Youst

To: Sanitarian Registration Board Members
From: Stephanie Youst, Executive Secretary
Date: March 5, 2010
Re: Executive Secretary Report for March 10, 2010

Overview of Activities since the January 27, 2010 Meeting

- Reviewed applications for registration and continuing education credit.
- Reviewed and processed renewal applications.
 - Mailed 127 registered sanitarian expiration notices and 25 sanitarian in training expiration notices on February 1, 2010.
- Proctored the PES examination on February 16, 2010 for 18 applicants.
- Attended Ohio Boards and Commissions Management Group meetings on January 28, 2010 and February 25, 2010.

Registration Census

The following table lists the number of individuals with active registrations as of January 22, 2010.

Registration Type	Total 11/23/09	Total 1/22/10	Total 3/5/10
Registered Sanitarian	1,321	1,278	1,279
Sanitarian in Training	154	145	123
TOTAL	1,475	1,423	1,402

Budget Update FY 10

The attached report reflects the monies used and received by the Board through June 30, 2010. The report is updated quarterly. The following is a listing of major expenditures, excluding payroll costs for the Board, that appear on the expenditure report:

Exams

1st Quarter: \$3,300 cost for examinations given August 18, 2009.

Central Service Agency

1st Quarter: \$1,020.62 cost for Q1 payroll assessment and Q4 FY09 copier charges

2nd Quarter: \$935.16 cost for Q2 payroll assessment and Q1 FY10 copier charges

Computer Services

1st Quarter: \$898.35 cost for six months of OAKS service fees and general computer connections/usage for the office

2nd Quarter: \$1,447.02 cost for six months of OAKS service fees and general computer connections/usage for the office

Sanitarian Registration Board Revenue/Expenditure Report FY 10
as of 12/31/09

Revenue	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
	\$37,277.00	\$23,741.44	\$0.00	\$0.00	\$61,018.44

Staff Payroll (500)	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
Basic Wages	\$18,811.41	\$13,170.43	\$0.00	\$0.00	\$31,981.84
Salaries - OT Compensation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paid Leave & Othr Compensation	\$2,817.25	\$3,477.75	\$0.00	\$0.00	\$6,295.00
Leave Balances Pd. @ Term.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Employer-Paid Benefits	\$5,028.41	\$3,977.32	\$0.00	\$0.00	\$9,005.73
DAS Payroll Charges	\$522.92	\$396.56			\$919.48
Total Staff Payroll	\$27,179.99	\$21,022.06	\$0.00	\$0.00	\$48,202.05

Personal Services (510)	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
Board Member Travel	\$910.90	\$814.30	\$0.00	\$0.00	\$1,725.20
Court Reporters	\$0.00	\$75.00	\$0.00	\$0.00	\$75.00
Exams	\$3,330.00	\$0.00	\$0.00	\$0.00	\$3,330.00
Conference Registration Fees	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other (insurance, member dues, subscriptions)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Personal Services	\$4,240.90	\$889.30	\$0.00	\$0.00	\$5,130.20

Maintenance (520)	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
Office Supplies	\$0.00	\$146.54	\$0.00	\$0.00	\$146.54
Staff Travel - Mileage (in state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Meals (in state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Lodging (in state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Miscellaneous	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Mileage (out of st.)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Transportation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Meals (out of st.)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Lodging (out of st.)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Staff Travel - Misc (out of st.)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Regulated Wired T-Com	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Hines & Associates	\$167.70	\$75.00	\$0.00	\$0.00	\$242.70
DHL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Duplicating Paper and Supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Printing/Copying	\$0.00	\$2.11	\$0.00	\$0.00	\$2.11
Legal Notices in Newspapers	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Rent (+space repairs, improve)	\$811.41	\$811.41	\$0.00	\$0.00	\$1,622.82
Central Service Agency	\$1,020.62	\$935.16	\$0.00	\$0.00	\$1,955.78
Telephone (DAS)	\$141.63	\$136.94	\$0.00	\$0.00	\$278.57
DAS Motor Pool	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
State Purchasing Services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DAS Centralized Mail Service	\$577.71	\$416.00	\$0.00	\$0.00	\$993.71
Computer Services (State)	\$898.35	\$1,447.02	\$0.00	\$0.00	\$2,345.37
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Maintenance Cost	\$3,617.42	\$3,970.18	\$0.00	\$0.00	\$7,587.60

Equipment (530)	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
Computer / IT Purchases	\$0.00	\$972.00	\$0.00	\$0.00	\$972.00
All other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Equipment Cost	\$0.00	\$972.00	\$0.00	\$0.00	\$972.00

**Board Travel & Maintenance
(520)**

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
Mileage (in state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Meals (in state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Lodging (in state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Travel Expenses (in state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Travel (out of state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Meals (out of state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Lodging (out of state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Travel Exp (out of state)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Misc. Expenses (non-travel)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Conference Registrations (510)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Board Maintenance	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Refunds (595)

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Grand Total
Total Operational Costs	\$35,038.31	\$26,853.54	\$0.00	\$0.00	\$61,891.85
Total Encumbered Funds Spent	\$5,938.31	\$972.00			\$6,910.31
Remaining FY10 Budget					\$75,018.46

As of December 31, 2009 184 of 365 days in FY10 have lapsed.
As of December 31, 2009 50% of FY10 has lapsed.



State of Ohio

State Board of Sanitarian Registration
77 South High Street
16th Floor
Columbus, Ohio 43215-6108
E-mail: stephanie.youst@exchange.state.oh.us
Web Address: <http://sanitarian.ohio.gov>

To: Board Members
From: Stephanie Youst, Executive Secretary
Re: PES Examination Results from February 16, 2010
Date: March 9, 2010

18 candidates took the examination on February 16, 2010. Of the 18 candidates, 61% passed (11).

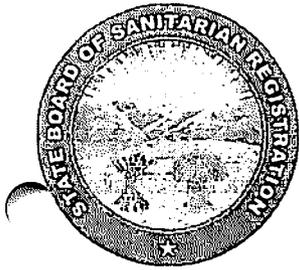
9 candidates took the exam for the 1st time. Of the 9 candidates, 44% passed (4).

6 candidates took the exam for the 2nd time. Of the 6 candidates, 67% passed (4).

3 candidates took the exam for the 3rd or greater time. Of the 3 candidates, 67% passed (2)

Exam	Date	Number of Candidates	Pass Point	% of Passing
PES	8/15/03	49	175/250	24.5%
PES	12/11/03	62	175/250	39%
PES	3/11/04	54	175/250	28%
PES	7/15/04	58	175/250	29%
PES	10/28-29/04	60	175/250	38%
PES	3/24/05	64	175/250	48%
PES	7/21/05	35	175/250	20%
PES	10/20/05	46	175/250	48%
PES	3/23/06	43	175/250	37%
PES	7/20/06	35	Scaled 70% (174/250)	26%
PES	10/19/06	53	Scaled 70% (172/250)	53%
PES	3/22/07	49	Scaled 70% (175/250)	61%
PES	7/19/07	29	Scaled 70% (172/250)	31%
PES	10/18/07	41	Scaled 70% (175/250)	41%
PES	3/27/08	47	Scaled 70% (174/250)	43%
PES	5/22/08	37	Scaled 70% (172/250)	43%
PES	10/23/08	43	Scaled 70% (172/250)	47%
PES	2/17/09	26	Scaled 70% (175/250)	35%
PES	5/20/09	37	Scaled 70% (174/250)	46%
PES	8/18/09	25	Scaled 70% (172/250)	48%
PES	11/18/09	21	Scaled 70% (175/250)	57%
PES	2/16/10	18	Scaled 70% (174/250)	61%

cc: Scott Bradley, R.S.
Gerald Scott, R.S.



Ohio State Board of Sanitarian Registration

77 South High Street, 16th Floor
Columbus, Ohio 43215-6108

Governor
Ted Strickland
Executive Secretary
Stephanie Youst

March 11, 2010

Gerald E. Vallee, M.D.
Health Commissioner
499 Jackson Pike, Suite D
Gallipolis, Ohio 45631-1398

Dr. Vallee:

This letter is in response to your inquiry into Gregory Spear's examination score on the November 18, 2009 Professional Examination Services (PES) examination.

In accordance with rule 4736-9-03 of the Ohio Administrative Code, the Board requires a minimum passing score of 70.0% on the PES examination. The Board contracts with PES to provide and grade the examination given to all applicants. Should Mr. Spear wish to have his examination rescored by hand, he needs to contact PES directly at 475 Riverside Drive, New York, New York, 10115-0089. This process must be initiated by Mr. Spear via written request sent directly to PES along with a \$50.00 fee. The fee must be in the form of either a cashier's check or money order made payable to PES. Personal checks are not accepted.

PES does not offer performance feedback reports on this particular examination. The only breakdown that is available regarding Mr. Spear's performance is the breakdown he received in the examination score letter from the Board.

The Board thanks you for your inquiry. Should you have any further questions, please feel free to contact me at stephanie.youst@exchange.state.oh.us or (614) 466-1772.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephanie K. Youst".

Stephanie K. Youst
Executive Secretary

cc: Barb Bradley
Gregory Spear

GCGHD

GERALD E. VALLEE, M.D.
HEALTH COMMISSIONER

GALLIA COUNTY GENERAL HEALTH DISTRICT

499 JACKSON PIKE, SUITE D, GALLIPOLIS, OHIO 45631-1398 • (740) 441-2018 • FAX (740) 441-2045

To: State Board of Sanitarian Registration
77 South High Street, 16th Floor
Columbus, OH 43215-6108

Regarding: State Sanitarian Registration Examination, November 18, 2009
Examination location: Pickerington, Ohio
Gregory A. Spear, License # SIT 072568
Gallia Co Health Department, 499 Jackson Pike, Suite D, Gallipolis, Ohio 45631
740 441-2945

February 11, 2010

Dear State Board,

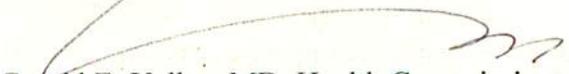
This letter is regarding an appeal notice to the State Board of Sanitarians, to appeal a score of 69%, Gregory A. Spear received on the Registered Sanitarian Exam taken on November 18, 2009. The literature on your website states a scaled score of 70% that may be statistically adjusted, is needed to pass. The examination overview rules, passing points and results, mentions nothing about the correct number of answers that are needed to pass, just the percentage.

Gregg's actual score for this examination was 69.6%. **The Rules for Rounding Numbers**, example a score of 69.5%, would automatically be rounded up to the next even percent score. With his score of 69.6%, it should have been rounded to a test score of 70%. Therefore, we feel his score should be granted a passing grade for this examination, taken on November 18, 2009, not a letter of failure.

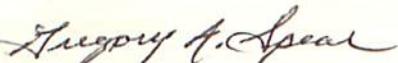
Conversations have occurred regarding this matter with the Gallia Co. Director of Environmental Health and the Health Commissioner; both agree with the reasoning and the above statement. Also, other State Registered Sanitarians that have been spoken to, they also have concurred that a 69.6% score should have been rounded up to a passing score of 70%.

Hopefully the Board will agree and make the right decision to correct this test score to 70% and issue a passing score for Gregory A. Spear. Thank you for your time and consideration and hope to hear from you in the near future regarding this matter.

Respectfully,


Gerald E. Vallee, MD, Health Commissioner, Gallia Co Health Department


Barb Bradley, Sanitarian, RS, Director Environmental Health, Gallia Co Health Department


Gregory A. Spear, Sanitarian, SIT, Gallia Co Health Department

RECEIVED

FEB 22 2010

Sanitarian
Registration Board



Search the Site Go

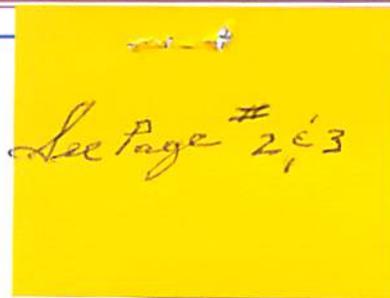
Teaching Quantitative Skills in the Geosciences

resources for undergraduate students and faculty

Quantitative Skills > Teaching Methods > Understanding Uncertainty > Rounding Numbers

Rounding Numbers

Rules for Rounding Numbers



Scientists have a convention for rounding numbers to the appropriate number of significant figures. In the age of calculators that mindlessly present many digits more than are significant, knowing how to round numbers "to the nearest tenth" or "to the nearest millionth" is essential.

Teaching Tips

When students are asked to calculate numbers to a certain number of significant figures they almost invariably have to know how to properly round off the answer they get with their calculator. While most students think they know how to round numbers, there are two common mistakes that are made.

- First, some students believe that you simply drop any digits to the right of the last significant figure (thus 'cutting off' the number rather than rounding it off).
- Second, when the digit to the immediate right of the last significant figure is 5 many students simply drop the 5 and add 1 to the last significant figure (the automatically round up). This creates an inherent bias in rounding numbers up more frequently than rounding numbers down.

A discussion of the rules of rounding should occur before students are asked to calculate and report their results for any exercise.

Teaching Resources

For a short discussion of rounding numbers that includes specific examples you can download this file. You might want to give this to your students as a quick primer or use it to create a problem set for your students. (Written by Vince Cronin, Baylor University.)

[Primer on Rounding Numbers](#) (Microsoft Word 28kB May24 07)

Web Links

This is an interactive site where you can practice rounding numbers.

[Practice Rounding Numbers](#)

Rounding Numbers

Scientists have a convention for rounding numbers to the appropriate number of significant figures. In the age of calculators that mindlessly present many digits more than are significant, knowing how to round numbers “to the nearest tenth” or “to the nearest millionth” is essential.

Imagine that we have a set of numbers that we need to round to the nearest integer (*i.e.* the nearest whole number, without any digits to the right of the decimal point).

(1) If the first digit to the right of the decimal point is *smaller than 5*, drop all digits to the right of the decimal point and leave the first digit to the left of the decimal point unchanged. For example:

137.4	}	are rounded to 137
137.3		
137.2		
137.1		
137.0		

(2) If the first digit to the right of the decimal point is *larger than 5*, drop all digits to the right of the decimal point and add 1 to the first digit to the left of the decimal point (*i.e.*, round up). For example:

137.6	}	are rounded to 138
137.7		
137.8		
137.9		

(3) If the first digit to the right of the decimal point is 5 and the digit to the left is an *even* number, then drop all digits right of the decimal point and leave the first digit to the left of the decimal point unchanged. For example:

130.5 is rounded to 130
 132.2 is rounded to 132
 134.4 is rounded to 134
 136.5 is rounded to 136
 138.5 is rounded to 138

(4) If the first digit to the right of the decimal point is 5 and the digit to its left is an *odd* number, then drop all digits to the right of the decimal point and add 1 to the first digit to the left of the decimal point (*i.e.*, round up). For example:

131.5 is rounded up to 132
 133.5 is rounded up to 134
 135.5 is rounded up to 136
 137.5 is rounded up to 138

139.5 is rounded up to 140

This minimizes the cumulative effect of "rounding errors."

Practice in Rounding:

- a) 1234.567 rounded to the nearest hundredths place is _____
- b) 1234.997 rounded to the nearest hundredths place is _____
- c) 1234.567 rounded to the nearest tenths place is _____
- d) 1234.957 rounded to the nearest tenths place is _____
- e) 1234.857 rounded to the nearest tenths place is _____
- f) 1234.567 rounded to the nearest integer is _____
- g) 1234.567 rounded to the nearest tens place is _____

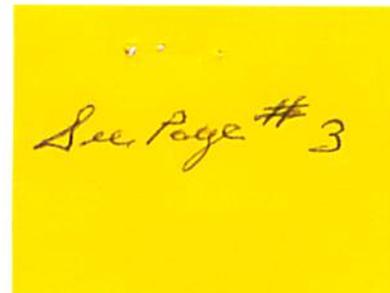
Answers:

- a) 1234.57
- b) 1235.00
- c) 1234.6
- d) 1235.0
- e) 1234.8
- f) 1234
- g) 1230

For more information you can go to:

<http://mathworld.wolfram.com/Rounding.html>

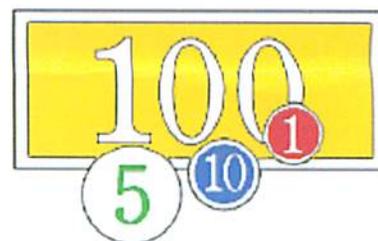
[Math](#) > [Numbers](#)



Rounding Numbers

A rounded number has **about the same value** as the number you start with, but it is **less exact**.

For example, 341 rounded to the nearest hundred is 300. That is because 341 is closer in value to 300 than to 400. When rounding off to the nearest dollar, \$1.89 becomes \$2.00, because \$1.89 is closer to \$2.00 than to \$1.00



Rules for Rounding

Here's the general rule for rounding:

- If the number you are rounding is followed by 5, 6, 7, 8, or 9, round the number **up**. Example: 38 rounded to the nearest ten is 40¹
- If the number you are rounding is followed by 0, 1, 2, 3, or 4, round the number **down**. Example: 33 rounded to the nearest ten is 30

What Are You Rounding to?

When rounding a number, you first need to ask: **what are you rounding it to?** Numbers can be rounded to the nearest ten, the nearest hundred, the nearest thousand, and so on.

Consider the number 4,827.

- 4,827 rounded to the nearest ten is 4,830
- 4,827 rounded to the nearest hundred is 4,800
- 4,827 rounded to the nearest thousand is 5,000

All the **numbers to the right of the place you are rounding to become zeros**. Here are some more examples:

- 34 rounded to the nearest ten is 30
- 6,809 rounded to the nearest hundred is 6,800
- 1,951 rounded to the nearest thousand is 2,000

Rounding and Fractions

Rounding fractions **works exactly the same way** as rounding whole numbers. The only difference is that instead of rounding to tens, hundreds, thousands, and so on, you round to tenths, hundredths, thousandths, and so on.

- 7.8199 rounded to the nearest tenth is 7.8
- 1.0621 rounded to the nearest hundredth is 1.06
- 3.8792 rounded to the nearest thousandth is 3.879

Here's a tip: to **avoid getting confused** in rounding long decimals, **look only at the number in the place you are rounding to and the number that follows it**. For example, to round 5.3824791401 to the nearest hundredth, just look at the number in the hundredths place—8—and the number that follows it—2. Then you can easily round it to 5.38.

Rounding and Sums

Rounding can **make sums easy**. For example, at a grocery store you might pick up items with the following prices:

- \$2.25
- \$0.88
- \$2.69

If you wanted to know about how much they would cost, you could add up the prices with a pen and paper, or try to add them in your head. Or you could do it the simple way—you could estimate by rounding off to the nearest dollar, like this:

- \$2.00
- \$1.00
- \$3.00

By rounding off, you could easily figure out that you would need about \$6.00 to pay for your groceries. This is pretty close to the exact number of \$5.82.

As you can see, in finding a round sum, it is quickest to **round the numbers before adding them.**

1. Some statisticians prefer to round 5 to the nearest even number. As a result, about half of the time 5 will be rounded up, and about half of the time it will be rounded down. In this way, 26.5 rounded to the nearest even number would be 26—it would be rounded down. And, 77.5 rounded to the nearest even number would be 78—it would be rounded up.

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[Mean and Median](#)

[Numbers](#)

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More on Rounding Numbers - Rules Examples For Fractions Sums from Fact Monster:

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CE 2's for Board Review / Approval 3/10/2010

Course Number	Name	Course Title	Course Date	Hours
353 / Appeal	Charles Hooper	GroupWise 7.0	12/9/09	12
409 / Appeal	Matthew Hofelich	Ohio Coordinating Committee for the Control of Depredating Birds	12/7/09	2
462	Tim Ingram	2009 NACCHO Annual Conference: The New Public Health	7/31/09	10
463	Caroline Terakedis	Environmental Health Training in Emergency Response	2/10/09	10
464	Harold Vermillion	Livestock in Disaster	1/15/10	10
465	Harold Vermillion	Fundamentals of Emergency Management	1/20/10	10
466	Tim Ingram	2009 National Biowatch Workshop	8/17/09	15
467	Frances Veverka	Next Wave of Wage & Hour Litigation	1/20/10	1.5
468	Jeffrey Gerdes	Lead Abatement Contractor Initial Certification	1/29/10	13
469	Bruce Baldinger	Performance Standards	9/1/09	4
470	Bruce Baldinger	Environmental Public Health Tracking 101	1/24/10	4
471	Roy Croy	Hazardous Materials Prevention	1/28/10	1
472 A	Thomas Hut	Pesticide Commercial Applicator Recertification 2010	1/13/10	3.5
472 B	Fred Jeffers	Pesticide Commercial Applicator Recertification 2010	1/13/10	5
473	John Gedeon	Going Green & Organic	1/30/10	1
474	John Gedeon	IPM for Cockroach Control	1/30/10	1
475	James Hightower	Microsoft Office Info Path 2007	1/5/10	7
476	Eileen Moran	Clean Air Act Enforcement	11/18/09	13.25
477	Robert Large	Disaster Debris Training for SWMD's & EMA's	1/21/10	2.5
478	Kirk Dymbrowski	Photography for FDA Enforcement	3/27/09	2
479	Kirk Dymbrowski	Food Labeling	4/16/09	1
480	Kirk Dymbrowski	Food Microbiological Control 12: Cleaning & Sanitizing	5/15/09	2

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481	Kirk Dymbrowski	Food Microbiological Control 10: Aseptic Sampling	5/14/09	2
482	Kirk Dymbrowski	The Role of Sanitarians in Disasters	1/22/10	1
483	Kirk Dymbrowski	FDA Radiological Emergency Response Plan	3/27/09	1
484	Kirk Dymbrowski	Food Safety	1/22/10	1
485	Kirk Dymbrowski	Bovine Spongiform Encephalopathy	4/6/09	1
486	Kirk Dymbrowski	Food Microbiological Control 11: Good Manufacturing Practices	5/15/09	2
487	Kirk Dymbrowski	Interviewing Techniques	3/27/09	1
488	Kirk Dymbrowski	Risk Communication Strategies for Public Health	1/26/10	2
489	David Budd	Ethics Training	1/16/09	1
490	Marjorie Broadhead	Zoonosis, Preparedness, and Public Health	1/25/10	3
491	Kevin Hanley	Toxicology & Risk Assessment Conference	4/30/09	18
492	Raafeeq Ali	ServSafe	11/12/09	6
493	Robin Kory	Effective Communication	1/25/10	8
494	Jeff Leever	NEHA 2009 Annual Education Conference	6/24/09	18
495	Jared Warner	Public Safety WMD Response	1/14/10	18
496	Patrick Cusick	Ohio Public Health Communication System	1/7/10	4.5
497	Patrick Cusick	Emergency Response Training for Environmental Health Professionals	12/30/09	15
498	Matthew Hofelich	OPGMA Congress	1/20/10	7
499	Todd Paulus	Household Sewage Treatment System & Property Transfer Program	1/12/10	2
500	David Klusman	Bloodborne Infectious Diseases	11/13/09	1
501	David Klusman	MEHA 65th Annual Educational Conference	3/20/09	17
502	David Klusman	Food Manufacturing	10/30/09	3
503	Ronald Clinger	Chemical Agents: Toxicity, Evaluation, & Control	12/16/09	18

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504	Susan Hoertt	OSHA 8 Hour HAZWOPER Refresher	1/26/10	8
505	Ryan Tekac	Water Policy & Planning	12/15/09	18
506	Wesley Vins	Geology & the Environment 2	5/10/09	2
507	Steve Lowery	The Use of Federal Reference Methods in the Evaluation of Landfill Gas Emissions	4/9/09	18
508	Anthony Schoenlein	eCore Disaster Life Support	2/10/10	4
509	Robert Sennish	eDWR Training for Certified Laboratories	2/1/10	2
510	David O'Toole	Hazardous Materials Advanced	1/27/10	2
511	Jason Ahrens	2010 Sewage Program Workshop	1/28/10	6
512	Brian Richard	Emergency Operations Center	1/28/10	8
513	Kim Polen	Empowering Conversations in a Changing World	8/6/09	6
514	Kim Polen	Implementing Restoration Targets & Achieving on the Ground Results for the Great Lakes	10/2/09	11
515	Teresa Jones	ServSafe	9/22/09	15
516	William Franks	AOHC Fall Flu Planning	7/14/09	2.5
517	Mark Needham	Lead Abatement Contractor Initial Certification	1/29/10	18
518	Maera Flynn	Compost Program Cross Training	11/10/09	2
519	Maera Flynn	Incinerators & Waste to Energy Facilities	11/10/09	.5
520	Sean Tolentino	Hazardous Materials Advanced	1/23/10	2
521 A	Ivan Langovsky	The Management of Epidemic Disease	2/18/10	1.5
521 B	Nancy Petrovski	The Management of Epidemic Disease	2/18/10	1.5
521 C	Heather Maher	The Management of Epidemic Disease	2/18/10	1.5
521 D	Courtney Myers	The Management of Epidemic Disease	2/18/10	1.5
521 E	Christina Gallion	The Management of Epidemic Disease	2/18/10	1.5
522 A	Wallace Chambers	Healthy Homes Initiative Meeting	1/21/10	3.25

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522 B	Thomas Campensa	Healthy Homes Initiative Meeting	1/21/10	3.25
523	William Edwards	Pauling County Sewage Contractor Meeting	2/5/10	3
524	Peter Hoffmire	13th Annual Joint AWMA/NYWEA Seminar	2/11/10	5.75
525	Peter Hoffmire	Hazardous Waste Operations & Emergency Response	2/12/10	6
526	Robert Caudill	Intermediate Field Investigator Response & Surveillance Training	2/2/10	14.75
527	Robert Caudill	Field Investigator Response & Surveillance Training	1/19/10	7
528	Robert Caudill	Basic Epidemiology	1/12/10	4
529	Robert Gallenstein	eCore Disaster Life Support	12/22/09	4
530	Kenneth Hermiller	An Introduction to Hazardous Materials	2/1/10	10
531	Kenneth Hermiller	A Citizens Guide to Disaster Assistance	2/2/10	10
532	Kathy Shull	Cadmium Toxicity	2/2/10	15
533	Janet Gammell	Highlighting the Effective Uses of Environmental Public Health Training	2/11/10	1
534	Janet Gammell	Leadership Medina County	2/10/10	6.5
535	Jeff Agnew	Pesticide Commercial Applicator Recertification 2010	1/13/10	5
536	Robert Little	Hanson Pipe & Precast Tour	2/11/10	3
537	Anthony Schoenlein	Pandemic Influenza Training	2/11/10	1.5
538	Robert Zahirsky	Controlling VOC Emissions from Leaking Process Equipment	2/21/10	18
539	David Nutini	Public Health Preparedness Summit 2010	2/19/10	18
540	Kathy Shull	Uranium Toxicity	2/18/10	2
541	Kathy Shull	Tetrachloroethylene Toxicity	2/12/10	1
542	Kathy Shull	Ready, Set, Surge!	2/11/10	2
543	Mark Roberts	ServSafe **Instructor**	2/4/10	6
544	Marie Lammers	Compost Program Cross Training	11/10/09	2
545	Roy Wiseman	KOWA 15th Annual Conference & Expo	12/4/09	12

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546	Roy Wiseman	Daily Operations & Safety Training	12/11/09	6
547	James Smith	Pesticide Commercial Applicator Recertification 2010	2/17/10	5
548	Eric Zgodzinski	Public Health Preparedness Summit 2010	2/16/10	15.75
549	Steve Miric	No Fear Act Refresher	5/28/10	2
550	Steve Miric	FY2010 USDA Information Security Awareness & Rules of Behavior	12/28/09	3
551	Steve Miric	FSIS Employee Preparation for an H1N1 Human Pandemic Training	11/23/09	1
552	Steve Miric	Tonsil Course FSIS 808-09	7/21/09	2
553	Steve Miric	FSIS Verifying Sanitary Dressing & Process Control Procedure	7/16/09	2
554	Steve Miric	FSIS Industry Practices for Producing Shelf Stable Products	2/18/10	5
555	Steve Miric	Humane Handling Basics	4/21/09	3
556	Steve Miric	Getting Started with Outlook 2007	2/4/10	1.5
557	Steve Miric	Ethics Conflict	2/9/10	1
558	Ed Newman	Tour & Round Table Q & A **Speaker Credit**	2/12/09	3
559	Ed Newman	Recycle Mania Promotion Webinar **Speaker Credit .5 Hours**	1/12/10	2
560	Ed Newman	Environmental Geography **Speaker Credit**	10/16/09	2.5
561	Ed Newman	Focus the Nation: Global Warming Solutions for America	2/4/09	2
562	Ed Newman	Solid & Hazardous Waste for Environmental Health	5/5/09	0 / Over Max Allowed for Presenting
563	Ed Newman	CURC Preconference Workshop	9/20/09	8
564	Dave Ellert	Pumper & Cleaner Environmental Expo	2/24/10	5
565	Jeffrey Martin	AIPG Intro to Landslides or Mass Wasting	2/3/10	3.5

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566 A	Jennifer Strong	Food Safety	2/18/10	1
566 B	Stephanie DeGenaro	Food Safety	2/18/10	1
566 C	Shannon Self	Food Safety	2/18/10	1
566 D	Melissa Adams	Food Safety	2/18/10	1
566 E	Karie Sanders	Food Safety	2/18/10	1
567	Linda Aller	2010 North American Environmental Field Conference & Expo	1/15/10	18
568	Kathleen Meckstroth	Vector Borne Disease & Rodent Associated Disease Organisms	1/31/10	1.5
569	Kathleen Meckstroth	Vector Borne Diseases of Public Health Importance	1/31/10	1
570	Kathleen Meckstroth	Effective Communication for Environmental Health	1/26/10	1.5
571	Kathleen Meckstroth	Environmental Public Health Tracking 101	1/31/10	4
572	Bruce Baldinger	Household Hazardous Materials	2/22/10	1
573	Bruce Baldinger	Deployment Basics for FEMA Response Partners	2/22/10	1
574	Bruce Baldinger	Special Needs Planning Considerations for Service & Support Providers	2/25/10	4
575	Kristopher Welch	11th Annual Wayne County Dairy Conference	2/24/10	3.5
576	Matthew Hofelich	Pesticide Commercial Applicator Recertification 2010	2/17/10	5
577	Kathy Shull	Pest Control	2/23/10	2.5
578	Kathy Shull	Food Safety	2/23/10	2.5
579	Kathy Shull	Housing	2/23/10	2.5
580	David Oakes	Annual Lead Case Manager Training	2/25/10	2
581	Rebecca Hysing	Emergency Operations Center Training	2/17/10	5.5
582	Bruce Baldinger	Introduction to NRF Support Annexes	3/3/10	1
583	Joe Wolf	Lead Inspector/Risk Assessor	10/31/08	12.5
584	Nicholas Hammer	Pesticide Commercial Applicator Recertification 2010	3/3/10	5

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585	David Kos	Contractor/Supervisor Asbestos Abatement Refresher	2/11/10	6.25
586	David Kos	Building Inspector/Management Planner Refresher	2/10/10	4.75
587	Stephanie McConoughey	What's Working for Bed Bug Control in Multifamily Housing	2/25/10	1
588	Philip Hartz	Foodborne Illness Reporting Manual Training	2/26/10	1.5
589	Todd Ascani	Pesticide Commercial Applicator Recertification 2010	3/3/10	5
590	Amy Ascani	Pesticide Commercial Applicator Recertification 2010	3/3/10	5
591	Davene Sarrocco Smith	Pesticide Commercial Applicator Recertification 2010	3/3/10	5
592	Chris Loxterman	Pesticide Commercial Applicator Recertification 2010	3/3/10	5
593	Jeffrey Martin	Analysis & Design of Aquifer Tests	3/4/10	18
594 A	Jacques Varty	Foodborne Reporting Forms Training	2/26/10	1.5
594 B	Paul Hagen	Foodborne Reporting Forms Training	2/26/10	1.5
594 C	Stefen Balle	Foodborne Reporting Forms Training	2/26/10	1.5
594 D	Tom Rutter	Foodborne Reporting Forms Training	2/26/10	1.5
594 E	Kristin Tillison	Foodborne Reporting Forms Training	2/26/10	1.5
594 F	Lauren Schacht	Foodborne Reporting Forms Training	2/26/10	1.5
595	Martha King-Smith	11th Annual Northeast Ohio Regional Dairy Conference	2/24/10	3.5
596	Michael Sabbato	Forensic Epidemiology: Joint Training for Law Enforcement & Public Health Officials	2/18/10	3
597	Shannon Sellards	Leadership & Influence	3/2/10	9

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ATA	Agency	Contact	Address	City	State	Zip
129	Preble County General Health District	Jenny Couse	615 Hillcrest Drive	Eaton	Ohio	45320

CE 4 for Board Review / Approval 3/10/2010

Course Number	Course Sponsor	Contact	Course Name	Course Date	Hours
10-156	Bowling Green State University	Jennifer Wagner	Issues Related to Coordinating People & Developing Policies in Large MultiLocation Organization	4/8/10	2
10-157	Clarke Mosquito Control	Brian Deenihan	Clarke Mosquito Control Training 2010	Various	3.75
10-158	Gallia County General Health District	Barb Bradley	Sewage Treatment System Workshop	2/25/10	4
10-159	Summit County General Health District	Jenifer Smith	Food Safety Basics	Various	2
10-160	Ohio Environmental Protection Agency	Jim Long	DSIWM Inspector Group Meeting	2/27/10	3
10-161	Ohio Environmental Protection Agency	Keith Riley	Safe Routes to Schools Program	1/28/10	0 Denied
10-162	Ohio Environmental Protection Agency	Keith Riley	Lake to River Bikeway Project	1/28/10	.5
10-163	Ohio Environmental Protection Agency	Keith Riley	Implementing Drinking Water Source Protection Plan Strategies for Ohio's Public Water Systems Using Surface Water Sources	2/3/10	.5
10-164	Ohio Environmental Protection Agency	Keith Riley	General Industries Case History	3/11/10	.5
10-165	TriState Environmental Health Association	Michael Bolen	Mosquito Trapping & Indoor Pool Air Quality	2/25/10	4
10-166	Bowling Green State University	Jennifer Wagner	A Growing Hunger: The Nation's Demand for Food Safety & Nutrition Information	4/8/10	1.5
10-167	OSU Center for Public Health Practice	Shirley Funt	Public Policy Institute	3/9/10	6.25
10-168	University of Cincinnati	Judy Jarrell	Launching A Healthy Housing Initiative	3/3/10	6.75
10-169	University of Cincinnati	Judy Jarrell	Essentials of Healthy Housing: Healthy Homes Practitioners	Various	13.5
10-170	Southeast Ohio Sanitarian's Association	Wendy Hanna	Hotel/Motel Inspections	2/11/10	2
10-171	360 Training	Kasey Ford	Confined Spaces	Various/Online	1
10-172	360 Training	Kasey Ford	Electrical Safety	Various/Online	1
10-173	360 Training	Kasey Ford	Ergonomics	Various/Online	1
10-174	360 Training	Kasey Ford	Lockout/Tagout	Various/Online	1
10-175	360 Training	Kasey Ford	Personal Protective Equipment	Various/Online	1
10-176	360 Training	Kasey Ford	Bloodborne Pathogens	Various/Online	1

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10-177	360 Training	Kasey Ford	Electrical Fundamentals	Various/Online	4
10-178	360 Training	Kasey Ford	HAZWOPER 8 Hour Refresher	Various/Online	8
10-179	360 Training	Kasey Ford	OSHA 10 hour General Industry	Various/Online	10
10-180	360 Training	Kasey Ford	Risk Management Protection	Various/Online	4
10-181	OSU Food Industries Center	Valente Alvarez	Enhancing the Safety of Foods in a Global Market	3/11/10	4.5
10-182	Ohio Department of Health Division of Prevention	Larry Holbert	NEHA Epi Ready Team Training	3/30/10	14
10-183	Ohio Environmental Protection Agency	Keith Riley	Use of Ohio EPA VAP at the Cuyahoga River Dredging Dike 14 Site	2/11/10	.75
10-184	Pool Operation Management	Kimberly Sherwood	Certified Pool Operator Course	Various	10.5
10-185	Zanesville Muskingum County Health Department	Adam Dickerson	Bedbug Symposium	2/23/10	3
10-186	Ohio Department of Health Division of Prevention	LeeAnn Todd-Hoon	2010 Midwest Workshop	3/8/10	6/Day Up to 24
10-187	Canton City Health Department	Christina Henning	Healthy Literacy: The Public Health Challenge	3/19/10	2
10-188	Cuyahoga County Board of Health	Suzanne Krippel	Preparing Communities for Agroterrorism	2/26/10	5
10-189	Toledo Lucas County Health Department	Konni Sutfield	Spring Forum on Environmental Health	3/12/10	6
10-190	Ohio Environmental Protection Agency	Jim Long	Compliance Assistance Conference: Successfully Navigating Reporting, Permitting, & Inspections	5/5/10	5.5
10-191	Ohio Environmental Protection Agency	Jim Long	Preparing Witnesses	2/18/10	1.5
10-192	BWC Division of Safety & Hygiene	Connie Snider	Accident Analysis	Various	6
10-193	BWC Division of Safety & Hygiene	Connie Snider	Bloodborne Pathogens	Various	3
10-194	BWC Division of Safety & Hygiene	Connie Snider	Certified Safety Professional Reviewer	Various	18
10-195	BWC Division of Safety & Hygiene	Connie Snider	Basic Construction Safety	Various	27
10-196	BWC Division of Safety & Hygiene	Connie Snider	Emergency preparedness Planning (Half Day)	Various	3
10-197	BWC Division of Safety & Hygiene	Connie Snider	Confined Space Assessment	Various	9
10-198	BWC Division of Safety & Hygiene	Connie Snider	Emergency preparedness Planning	Various	6
10-199	Ohio Environmental Protection Agency	Jim Long	Advanced Reading	Various	3.75/Day
10-200	Ohio Environmental Protection Agency	Jim Long	Using GIS in PTI Reviews	2/18/10	1.75
10-201	Ohio Environmental Protection Agency	Jim Long	Recycling Markets 2010	2/18/10	1.5

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10-202	Ohio Environmental Protection Agency	Jim Long	Scrap Tire Reuse & Recycling	2/23/10	1.5
10-203	Paratus Solutions	Kathryn Lewis	Strategic National Stockpile & Regional Resource Training	3/15/10	1
10-204	Stark County Health Department	Tim Gabrelick	Food Safety	2/18/10	1
10-205	Delaware General Health District	Melissa Adams	2010 Pool Operators Class	4/22/10	2
10-206	Ohio Environmental Health Association	Chris Cook	OEHA 64th Annual Educational Conference	4/21/10	12
10-207	Summit County General Health District	Jennifer Smith	Fishcreek Wastewater Treatment Plant	4/7/10	2
10-208	Ohio Environmental Protection Agency	Jim Long	DSIWM Inspector Group Meeting March 2010	3/18/10	1.5
10-209	Ohio Department of Health Division of Prevention	Larry Holbert	Investigation of Foodborne Disease Outbreaks	5/20/10	6
10-210	Toledo Lucas County Health Department	Debbie Dacquisto	Grease Interceptors & Backflow for Marinas	3/23/10	4
10-211	OSU Center for Public Health Practice	Shirley Funt	Excellence in Reporting Science: A Writing Workshop for Public Health Professionals	4/29/10	14.5
10-212	Association of Ohio Health Commissioners	Penny Hill	AOHC/OEPA Joint Conference	4/8/10	6.5
10-213	BWC Division of Safety & Hygiene	Connie Snider	Violence in the Workplace	Various	3
10-214	BWC Division of Safety & Hygiene	Connie Snider	Ergonomics: Basic Principles	Various	6
10-215	BWC Division of Safety & Hygiene	Connie Snider	Ergonomics: Developing an Effective Process	Various	6
10-216	BWC Division of Safety & Hygiene	Connie Snider	Fall Hazards in Construction & Maintenance	Various	12
10-217	BWC Division of Safety & Hygiene	Connie Snider	First Aid in the Workplace	Various	0 / Denied
10-218	BWC Division of Safety & Hygiene	Connie Snider	Fundamentals of an Effective Safety & Health Program	Various	12
10-219	BWC Division of Safety & Hygiene	Connie Snider	Hazard Communications	Various	9
10-220	BWC Division of Safety & Hygiene	Connie Snider	Hazard Communication Half Day Workshop	Various	3
10-221	BWC Division of Safety & Hygiene	Connie Snider	Hazardous Waste Operations & Emergency Response Awareness	Various	5
10-222	BWC Division of Safety & Hygiene	Connie Snider	Personal Protective Equipment Selection Criteria	Various	3
10-223	BWC Division of Safety & Hygiene	Connie Snider	Respirator Fit Testing	Various	15
10-224	BWC Division of Safety & Hygiene	Connie Snider	Restaurant & Food Service Safety	Various	6
10-225	BWC Division of Safety & Hygiene	Connie Snider	Safety & Ergonomics for Extended Care Facilities	Various	6
10-226	BWC Division of Safety & Hygiene	Connie Snider	Safety Fundamentals Examination Review	Various	18
10-227	BWC Division of Safety & Hygiene	Connie Snider	Scaffolding Safety	Various	12
10-228	BWC Division of Safety & Hygiene	Connie Snider	Temporary Traffic Management	Various	3

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10-229	BWC Division of Safety & Hygiene	Connie Snider	You Don't Have to Speak Spanish to Communicate Safety to Your Spanish Speaking Workforce	Various	6
10-230	BWC Division of Safety & Hygiene	Connie Snider	Hazardous Waste Operations & Emergency Response Refresher	Various	7
10-231	BWC Division of Safety & Hygiene	Connie Snider	Hazardous Waste Operations & Emergency Response Technician	Various	21
10-232	BWC Division of Safety & Hygiene	Connie Snider	How Methamphetamines Affect the Workplace	Various	3
10-233	BWC Division of Safety & Hygiene	Connie Snider	Job Safety Analysis	Various	6
10-234	BWC Division of Safety & Hygiene	Connie Snider	Laboratory Safety	Various	6
10-235	BWC Division of Safety & Hygiene	Connie Snider	Measuring Safety Performance	Various	6
10-236	BWC Division of Safety & Hygiene	Connie Snider	Nonviolent Strategies for Caregivers & Other Staff Working Directly With the Public	Various	6
10-237	Columbus Public Health	Mike Tedrick	Mobile Concession Training for Field Sanitarians	3/4/10	3
10-238	Ohio Environmental Protection Agency	Keith Riley	NEFCO Environmental Technical Advisory Committee: Middle Cuyahoga River Restoration: Watershed Coordinator Update	3/3/10	1
10-239	Operator Training Committee of Ohio	Erin Moore	47th Annual Wastewater Workshop	3/9/10	6 Hours/Day
10-240	Operator Training Committee of Ohio	Erin Moore	48th Annual Water Workshop	3/23/10	6 Hours/Day
10-241	Ohio Environmental Protection Agency	Jim Long	Ohio Safety Congress & Expo	3/30/10	Up to 24 Hours
10-242	Ohio Environmental Protection Agency	Column McKenna	NEDO March Meeting	3/22/10	1.5
10-243	BWC Division of Safety & Hygiene	Connie Snider	OSHA Recordkeeping	Various	6
10-244	Columbiana County Health Department	Shannon Sellards	Care & Maintenance of Commercial Pools	5/13/10	2