BERGEN GOES GREEN

CD 508 Introduction to Sustainability
8 sessions; 20 hours; $269
001, Th; October 1- November 19, 2015
Hours: 6:30-9:00 p.m.
Location: TBA
Sustainability is one of the most important and fastest growing interdisciplinary fields in the 21st century. Discover the true meaning of sustainability through this in depth study of the terms, core concepts, examples of sustainable practices, triple bottom line, and stakeholders.
Required Text: Cradle to Cradle, Remaking the way we make things, by M. Braungart & W.McDonough, available at the BCC bookstore.
Instructor: Terrance Moran, Sustainability & Energy Professional

CD 122 Introduction to Biofuels
5 sessions; 10 hours; $185
001, Fri, Sept. 25-October 23, 2015
Hours: 6:30-8:30 p.m., Field trip 9:00-11:00 a.m. (Date TBA)
Location: TBA
This course provides an understanding of the technologies that drives the Biofuels industry segments, the supply chain, markets, the impact on food production, and discuss the various motivations for its development. We will take an introductory look at the small business opportunities for Biofuels and take an educational field trip to a local biofuel facility. Course attendees provide own transportation.
Instructor: Gerald Vernice, Emeritus Member of American Chemical Society

CD 512 Water Resource Management
4 sessions; 10 hours; $199
001, Tue; November 24-December 15, 2015
Hours: 6:30-8:30 p.m., Field Trip 9:30 a.m.-11:30 a.m. (Date TBA)
Location: TBA
Join this class and learn how to manage and conserve water. This course will focus on sustainable development, water use within the focus of the design and build fields and will highlight sustainable solutions to reduce the impact on this precious natural resource. This course includes an educational field trip to a Water Treatment Plant, attendees provide own transportation. Trip dates subject to availability.
Instructor: Craig Doolittle, PE, TRC Solutions

BERGEN GOES GREEN

Bergen Community College recognizes the importance and increased interest in Green technologies and their applications. This semester we are offering courses in hopes of helping our community conserve energy and resources. The Division of Continuing Education, Corporate and Public Sector Training will offer courses in Photovoltaic System Design, (Solar Panel Array), with practical hands-on lab sessions for the contractor and in the area of construction we offer Introduction to Building Science and Designing Efficient Sustainable Buildings, including Water Resource Management and Waste Management and Reduction. Some courses offer industry recognized Continuing Education Units, CEU’s. For those students seeking employment within the green energy and sustainability workforce, a student may choose one or all of our courses in our Green Technologies and Sustainability Program. Click here to contact Roseanne Crisafi at or call (201) 447-7488.

CD 512 Water Resource Management
4 sessions; 10 hours; $199
001, Tue; November 24-December 15, 2015
Hours: 6:30-8:30 p.m., Field Trip 9:30 a.m.-11:30 a.m. (Date TBA)
Location: TBA
Join this class and learn how to manage and conserve water. This course will focus on sustainable development, water use within the focus of the design and build fields and will highlight sustainable solutions to reduce the impact on this precious natural resource. This course includes an educational field trip to a Water Treatment Plant, attendees provide own transportation. Trip dates subject to availability.
Instructor: Craig Doolittle, PE, TRC Solutions

CEUs OFFERED

CD 121 Comprehensive Advances in Monitoring the Soil Microbiome: In-Field Microbial Soil Analysis Workshop
1 session; $99
001, Sat; December 5, 2015
002, Sat; February 13, 2016
Hours: 7:30 a.m. – 3:00 p.m., Optional Networking Session 3:00-5:00 p.m.
Location: SA-115, C-211
The workshop focuses “What Do Soil Microbes Tell Us?” will be delivered in three informative modules. Beginning with a continental breakfast Dr. Judith Fitzpatrick will present recent literature on the significance of soil biomass, how these parameters are used to manage and monitor landscape and crops, and lead a group discussion on the significance of these findings on current and future projects. The second module is a hands-on Lab Session, participants will purify and analyze biomass from samples which are provided, (attendees are welcome to bring their own samples to analyze). Lunch will be served. Industry expert James Sottilo will lead an open conference for the third module discussing the new directions that research will take as the industry moves toward more earth friendly methods of providing for soil health. Results from this colloquium may be published. Although the workshop is finished at 3:00 p.m. attendees are welcome to stay and network until 5:00 p.m. Workshop attendees can earn Continuing Education Units, CEU’s from the Upstate NY Chapter American Society of Landscape Architects, ASLA, and the NJ Chapter of International Society of Arborists, ISA.
Instructors: James Sottilo, ASLA, Certified Soil Foodweb Advisor, ISA Certified Arborist; Principle Ecological Landscape Management; Judith Fitzpatrick, Ph.D. Microbiologist, Professor of Microbiology, Bergen Community College.

CD 578 Waste Management & Reduction
5 sessions; 15 hours; $249
001, Tue; September 22-October 20, 2015 (no class 10/27)
Hours: 6:30-9:00 p.m., Field trip during normal business hours.
Location: TBA
Take this course and learn about how waste management and reduction programs have developed in the US, the regulations and technologies that have emerged to support that development and practical approaches that can be employed to continually reduce our impacts on our environment. This course includes an educational Field Trip to a Recycling Facility. Course attendees provide own transportation.
Instructor: Craig Doolittle, PE, TRC Solutions

CD 523 Photovoltaic System Design and Installation (Solar Panel Array)
10 sessions; 30 hours; $350
001, Sat; October 3-December 12, 2015 (no class 10/31)
Hours: 9:00 a.m.-12:00 p.m., Field trip on a work day: 9:00-11:00 a.m. (Date TBA)
Hands-On Lab Hours: Sat. Lab Sessions; 9:00 a.m.-12:00 p.m.
Location: Paramus Campus
This introductory course teaches the technology and skills required for the design, installation and performance testing of residential and commercial photovoltaic systems. Emphasis is placed on understanding the basics of system function, components and design. Learn about System maintenance, monitoring issues. and important safety procedures. This course includes hands-on labs using industry equipment, practical group activities, and a field trip. Course attendees provide own transportation.
Instructor: Kris Pamidi, Certified Solar PV Professional
BERGEN GOES GREEN

PROFESSIONAL CEUs OFFERED

CD 510 Introduction to Building Science & Sustainable High Performance Building Design
8 sessions; 16 hours; $249
001, Wed; September 30-November 18, 2015
Hours: 6:30-8:30 p.m.
Location: TBA
Save energy by creating a more energy efficient building envelope. Participants will learn principles of air leakage and some key ways buildings are influenced by increased air tightening, mechanical exhaust devices and moisture movement. Determine the most cost effective air sealing guidelines and minimum ventilation requirements for occupants health and safety.

CEUs: BPI Professionals who register and complete this course can earn 8 BPI CEUs.

Required Text: Insulate and Weatherize by Bruce Harley, Available at the BCC Bookstore.

Instructor: Klas Haglid, PE, R.A., Haglid Engineering

CD 458 Building with Modular Construction
4 sessions; 10 hours; $199
001, Mon; October 5-26, 2015
Hours: 6:30-9:00 p.m.
Location: TBA
Course includes a detailed discussion of alternative construction methodologies starting with the historical background, evolution, trends, features and the benefits of modular or systems construction. The in-depth study of commercial and residential buildings focuses on quality control, energy performance and green building attributes of modular construction some of which are LEED Certified buildings.

Instructor: Joseph Bucci, Bucci & Associates Construction Management

CD 058 Ten-hour OSHA Construction Industry Safety Certification
3 sessions; 10 hours; $99
001, T/W/Th; September 8-10, 2015
Hours: 6:30-10:00 p.m.
Location: Paramus Campus
2 sessions; 12 hours; $99
002X, Sat; November 7 & 14, 2015
Location: Englewood, NJ
Hours: 8:30 a.m.-3:00 p.m.
This 10-hour course is an ideal orientation to those who are new to construction sites, maintenance workers, installers, and a variety of building related industries about the hazards associated with the construction industry. Registered attendees must bring two forms of ID. one must be a State photo ID. with a photograph. Upon successful course completion a $5.00 fee is due to the instructor payable by cashier's or personal check to receive the Certification ID Card delivered after the course has completed.

Instructors: John O'Reilly, State Certified OSHA Construction Safety Instructors

NEW

CD 133 30-hour OSHA Construction Industry Safety Certification
9 sessions; 30 hours; $199
001, T/W/Th/F/Sat; September 18-October 26, 2015
Hours: 6:30 p.m.-10:00 a.m.; Sat; 8:00 a.m.-2:00 p.m.
Location: Paramus Campus
This OSHA course is a comprehensive safety program designed for anyone involved in the construction industry that the program provides complete information on OSHA compliance issues. Upon successful course completion a $5.00 fee is due to the instructor to receive the Certification ID Card. Two forms of ID, including a State photo ID is required.

Instructor: John O'Reilly, State Certified OSHA Construction Safety Outreach Instructor

PROFESSIONAL CEUs OFFERED

CD 494 LEED Green Associate: Exam Prep
8 sessions; 20 hours; $325
001, Th; February 24-April 21, 2016
Hours: 6:30-9:00 p.m.
Location: TBA
The LEED Green Associate Exam is for professionals who want to demonstrate green building expertise in non-technical fields of practice. this course reviews the knowledge of green design concepts, terminology, construction, and operations. The Green Associate also serves as the first step for professionals pursuing a LEED AP with specialization.

Instructor: TBA

OFFERED IN THE SPRING, 2016

CD 581 Environmental Testing
6 sessions, 15 hours; $220
Environmental testing techniques have been developed to help scientists, engineers and decision makers assess environmental risk and take steps to assure the safety of people and the ecosystem. Take this course and learn about environmental testing procedures and how these techniques can help us protect people and the environment.

Instructor: Craig Doolittle, PE, TRC Solutions

CD 116 Energy and Sustainability for the Built Environment
8 sessions; 16 hours; $259
Broad overview of fundamental and applied concepts of energy in the overall context of the modern and built environment. Includes mechanical and electrical fundamentals to analyze the built environment, energy flows and balances. Course includes design problems and case studies. A detailed example of Weather Bin Modeling along with a financial analysis will be presented with student participating in making a working energy savings model as a final class project.

Instructor: Klas Haglid, PE, R.A., Haglid Engineering

CD 518 Green Advantage® Test Prep
4 sessions; 10 hours; $199
Learn the fundamentals of green construction practices; green rating systems like LEED, Green Globes, NAHB and get practical information on engaging in environmentally sustainable practices. The test fee of $175 is additional and students must register online at Green Advantage®.org.

Instructor: TBA
Sustainability Institute Fall 2015 Veteran’s Day Conference:
Bergen Community College & HackensackUMC Invite You to Join:
Healthcare Green for Healthier Environments Conference
HG4HE
Healthcare Professionals Can Earn 3.0 CEUs!
Participating Schools Can Earn Sustainable Jersey Points!

What:
Healthcare Green for Healthier Environments Conference

Who is presenting:
Kyle Tafuri, Sustainability Advisor, HackensackUMC
Ken Haber, Director of Environmental Health and Safety, HackensackUMC

When:
Veteran’s Day, November 11, 2015, 9 a.m.–12 p.m.

Where:
Bergen Community College, Room TEC 128, Moses Conference Center,
400 Paramus Road, Paramus NJ 07652

Why?
To help hospitals and healthcare facilities transition to a healthier environment for patients, team members and community through:
• Engaged Leadership
• Waste Reduction
• Responsible Purchasing
• Energy and Water Conservation
• Safer Chemicals
• Healthier Foods

Who Should Attend: Nurses • Patient Care Technicians • Dental Hygienists & Technicians • Geriatric Patient Healthcare Workers • Environmental Services Staff • Home Health Aides • School Nurses • Individuals who work in a hospital or healthcare facility • Community Members

In honor of our Veterans, their Healthcare Workers and Veterans working in Health Professions qualify for complimentary admission to the conference.

Registration: $25. Per person, advance registration only
Course Code: HH 336 001
Please register at Bergen.edu/continuinged or call 201-447-7488.

Space is limited please reserve your seat today!
For more information, please contact the Division of Continuing Education at 201-447-7488,
Nancy Owens, Associate Dean of Health Care Professions at nowens@bergen.edu,
or Roseanne Crisafi, Coordinator of Green Initiatives at rcrisafi@bergen.edu
BERGEN COMMUNITY COLLEGE
Division of Continuing Education, Corporate and Public Sector Training’s
Sponsored by United Water

Sustainability Institute
Student Challenge 2015
Competition and Awards Ceremony
Grades 1 through 6

Participating Schools can earn Sustainable Jersey School Points.

See pages 10-13 for 2016 details!
The Bergen Community College Division of Continuing Education invites all Bergen and Passaic County students to take the **Fourth Student Challenge**.  
**Wednesday; April 20, 2016 • 5:30-8:30 p.m.**

**The Challenge Question:**

How can you use a recycled, repurposed or reclaimed item or object in a classroom or school setting?

*Participating Registered Schools may earn points towards their sustainable Jersey certification

“We Do Not Inherit the Earth from Our Ancestors; We Borrow It from Our Children.”

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**Who?**

• Students who reside in the Northern New Jersey regional area in grades 1 through 6.

**What?**

• Grades 1-4, poster or art project
• Grades 5-6, model or science project
• Grades 7-12, participate in the hackathon

**When?**

• Registration Due: Wednesday, April 6, 2016

**Judging and Awards Presentation**

Grades 1-6, Wednesday, April 20, 2016; 5:30-8:30 p.m.
Grades 7-12, Thursday, April 28, 2016; 5:30-10:00 p.m.

**Where?**

• Bergen Community College
  Technology Education Center, Room 128
  Parking Lot B
  400 Paramus Road, Paramus, NJ 07652

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**Teacher/Parent Contact (email contact required):**

**Check Project Type:**

- Grade 1–4  □ Poster □ Art Project
- Grade 5 & 6 □ Model □ Science project
- Grade 7–12 □ Hackathon, groups of 4 students only

**Please mail, fax, or email your completed registration form to:**

Bergen Community College
Sustainability Institute, TEC-115
400 Paramus Road, Paramus, NJ 07652
Fax: 201-447-7861
Email: rcrisaf@bergen.edu

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To register, call: (201) 447-7488 • www.bergen.edu/continuinged
Rules & Regulations:
The Student Challenge consists of four competitions in six grade levels. Each competing student will receive a certificate of participation. Prizes will be awarded to first, second and third place winners in each category. Each participating student must indicate a school coordinator or parent contact person on the registration form.

Entries for student challenge accepted from individual students only. Each individual student is limited to one entry.

Six Competition Grade Levels:
The Student Challenge
- Grades 1-2
- Grades 3-4
- Grades 5-6

The Hackathon
- Grades 7-8
- Grades 9-10
- Grades 11-12

Eligibility:
1. Participants must be residents of Northern New Jersey and in grade levels 1-12.
2. Submissions must be students own work.
3. Students are required to prepare and deliver a brief verbal overview of their work to the judges during the competition.
4. All projects must be accompanied by the official project entry label on letter size paper, to be displayed next to the student or Hackathon student group project.

Registration Deadlines:
Registration forms due by:
Wednesday, April 6, 2016
Completed registration forms can be mailed, faxed or emailed to:
Bergen Community College
Sustainability Institute, TEC-115
400 Paramus Road, Paramus NJ 07652
Fax: 201-447-7861
e-mail to: rcrisafi@bergen.edu

Submissions:
Submission categories are listed below. Each individual or Hackathon student group is limited to one entry.

Grades 1-4:
- Poster - 22”L x 28”H
- Art Project - Maximum Size 24”L x 24”D x 24”H

Grades 5-6:
- Model - Maximum Size 24”L x 24”D x 24”H
- Science Project - 24”L x 36”H

Grades 7-12:
- Sustainability Hackaton

Students of participating Schools who are registered with Sustainable Jersey, may be eligible to receive points toward their certification.

Submissions without teacher or parental email contacts, or those involving controlled substances subject to government regulation, and those requiring access to electricity, will not be accepted.

Judging:
All students or groups of students must be present during the judging and awards ceremonies, and must be accompanied by a parent or legal guardian.

Submissions will be judged on creativity, ingenuity, scientific thought, thoroughness and clarity. Judges’ decisions are final.

Grades 1 through 6:
Wednesday, April 20, 2016, 5:30 - 8:30 p.m.
Entertainment and activities will be provided during the judging period.

Grades 7 through 12:
Thursday, April 28, 2016, 5:30 - 10:00 p.m.
Sustainability Hackaton—see Hackathon information page.

Competition and awards presentations will be held in TEC-128 on the Paramus main campus.

Student Challenge set-up time begins at 5:30 p.m. and must be completed by 6:00 p.m. All projects must be accompanied by the official project entry label, to be displayed next to the project. Judging begins at 6:15 p.m.

Students are responsible for removing their projects at the end of the competition awards ceremonies. Please note any projects remaining after the end of each competition awards ceremony will be discarded.

Space is limited. Registration is subject to space availability and will be on a first-come, first-served basis.
Sustainability Institute Student Challenge
Official Project Entry Label

The Challenge:
How can you use a recycled, repurposed or reclaimed item or object in a classroom or school setting?

Date: __________________________________________________________________________________________________________________

Student Name(s): ________________________________________________________________________________________________________

Hackathon Group Members: _______________________________________________________________________________________________

School: ________________________________________________________________________________________________________________

Grade: _________________________________________________________________________________________________________________

Category: ______________________________________________________________________________________________________________

Name of School Coordinator or Parent Contact: _______________________________________________________________________________

Coordinator/Parent Phone: ________________________________________________________________________________________________

Coordinator/Parent Email: _________________________________________________________________________________________________

Parental Permission: I give my child permission to participate in the first Student Challenge & Hackathon and his/her work can be placed on public display.

Parent signature: __________________________ Date ____________________

* Please display this label next to your project, or on your Hackathon Group Table.

Media Release – Required for participants; please visit or click here: http://ww3.bergen.edu/documents/pr/pdf/Student_Release_Form.pdf
Join the Second Sustainability Institute Middle & High School Hackathon
Thursday, April 28, 2016 – 5:30-10:00 p.m.
The Hackathon Question: Will be announced at the beginning of the event
Topic: Recycled, Reclaimed or Repurposed Materials

Where: Bergen Community College
When: Thursday, April 28, 2016; 5:30-10:00 p.m.

Rules & Regulations:
The Sustainability Institute Middle & High School Hackathon is a high-energy, collaborative event that seeks to bring together a diverse group of the student community to explore key issues and challenges related to Sustainability and to ponder solutions to everyday problems using STEM, (Science, Technology, Engineering and Math), in the process. The goal is to raise sustainability understanding, promote opportunities for increase environmental stewardship and awareness.

Registration Due: Wednesday, April 6, 2016
• Are you creative?
• Do you want to have fun and try something new?
• Do you want to meet other creative people?
• Do you want to develop technology innovations?
• Do you want to help solve world problems and make a difference?

Rules and Regulations:
The Hackathon consists of student and school group competitions in grades 7-12. Each group of four students can be composed of a single grade level or mixed grade levels as follows: 7 and 8, 9 and 10, 11 and 12. Each competing student will receive a certificate of participation.
Prizes will be awarded to first, second and third place winners at the grade levels listed. Each participating student must indicate a school coordinator or parent contact person on the registration form. Entries are accepted from schools or other parents/guardian groups in the Northern New Jersey region. Each group is limited to one entry.

Judging Criteria:
Is it functional? (25%)
Does it accomplish its stated goal?
Does it work as is, or does it require additional resources/items?
Does it use any new technology?
Can it be used anywhere, on a local, regional or global scale?
Is it intuitive? (25%)
Is it easy to understand?
Is it easy to use?
Is it creative?
Can it be fabricated from ordinary everyday objects?
Is it impactful? (25%)
Does it solve a real problem?
How many people does it impact (few/many)?
Is it viable? (25%)
Would anyone be able to use it?
Is it economically and environmentally feasible?
Does it create biodegradable waste?
Can it be produced?

Objectives:
We value and encourage the participation of each member of the student community and want all attendees to have an enjoyable and fulfilling experience. Accordingly, all attendees are expected to show respect and courtesy to other attendees throughout the hackathon. To make clear what is expected, all attendees and speakers at this hackathon are required to conform to a Code of Conduct*. Organizers will enforce this code throughout the event. For additional information contact Roseanne Crisafi at (201) 447-7863 or rcrisafi@bergen.edu.

All work to be completed at the event.
No advance work is permissible.

Registration is subject to space. Availability and will be on a first come, first served basis.

* Visit www.bergen.edu to view Code of Conduct.