

HONORS AND EMERGING SCHOLARS

POSTER PRESENTATION

LEARNING COMMUNITIES

THEME-BASED POSTER PRESENTATION

Wednesday, May 9, 2012 • 11:00 AM - 4:00 PM

Thursday, May 10, 2012 • 10:00 AM - 3:00 PM

Awards Ceremony

Klitgord Gym

STUDENT RESEARCH CONFERENCE

Thursday, May 10, 2012 • 9:30 AM - 12:00 PM Atrium Amphitheater

CONTENTS

4th Annual City Tech Student Research Conference	3
Honors Courses	5
Honors Scholars Projects	6
Emerging Scholars	10
Learning Communities Theme-Based Projects	17
Special Projects	18

AWARDS CEREMONY

May 10, 2012 • 12:30 PM • Klitgord Gym

Greetings

.....
Dr. Russell K. Hotzler
President

Dr. Bonne August
*Provost & Vice President
for Academic Affairs*

Dr. Estela Rojas
Director of Learning Communities

Presentation of Student Awards

.....
Dr. Janet Liou-Mark
Director of the Honors Scholars Program

Ms. Laura Yuen-Lau
*Coordinator of the
Honors Scholars Program*

Best Poster Awards

.....
Dr. Reneta Lansiquot
*Assistant Director of the
Honors Scholars Program*



Bodies: The Exhibition - March 9, 2012

4TH ANNUAL CITY TECH STUDENT RESEARCH CONFERENCE

May 10, 2012 • 9:30 AM – 12:00 PM
Atrium Amphitheater



Spring 2012 Peer Leaders

9:30 AM

Welcome

10:15 AM

Implant Stabilized Dentures

Jennifer Crane (Restorative Dentistry)
Prof. Daniel Alter

10:25 AM

Cement vs. Bonding

Amanda Yeung (Restorative Dentistry)
Prof. Daniel Alter

10:35 AM

Macroscopic Quantum Effects in the System of Trapped Dipolar Excitons in Semiconductor Coupled Quantum Wells

Victor He (Physics)
Prof. Oleg Berman & German Kolmakov

10:50 AM

Bhabha Scattering, Aluminosity Candle at Electron-Positron Colliders

Andrey Galper (Physics)
Prof. Giovanni Ossola

11:00 AM

Infinite Real Estate?

Yi Ming (Mathematics)
Prof. Satyanand Singh

11:20 AM

Keep it Updated: Basic Steps for Including RSS in Web Sites

Donald Cherestal (Computer Systems)
Prof. Marcos Pinto

11:35 AM

Creating Apps for Mobile Devices

Blavik Shah (Computer Systems)
Prof. Marcos Pinto

11:45 AM

Factors Affecting the PEM Fuel Cell Characteristic Curve

Yapah Berry, Olivia Reed, Sean Pratt
(Mechanical Engineering)
Prof. Malek Brahim

11:55 AM

The Epidemiologic Picture of Tuberculosis in Brooklyn

Alketa Plaku (Biology)
Prof. Liana Tsenova



Advancing Library Research Techniques, Prof. Maura Smale
March 15, 2012

The School of Arts and Sciences Research and Grants Committee:

Delaram Kahrobaei (Chair), Oleg Berman, Zhao Chen,
Kyle Cuordileone, Ann Delilkan, Anna Do, Andrew Douglas,
Andrea Ferrogli, Laura Ghezzi, Laina Karthikeyan,
Tony Nicolas, Giovanni Ossola, Eric Rodriguez,
Alex Rozenblyum, Annette Saddik, Hans Schoutens,
Thomas Tradler, Tshombe Walker

HONORS COURSES

MAT 1475H: Calculus I Honors
Prof. Satyanand Singh

An Industrious Bug Confined to a Mound

Theresa Adams, Farisa Ahmed, Reginald Climes, Roberto Coyotl, Felix Delacruz, Fabrice Douillard, Lane Facey, Brayan Feliz, Anna Harutyunyan, Syed Hussain, Connie Look, Dany Louis, Luka Machavariani, Nicole Montenegro, Jason Ng, Armando Perez, Arthur Plourde, Sadi Raihan, Muntasir Rana, Trung Tran, Anwar Uddin, Rita Uzamere and Chhoti Sherpa

Abstract:

We will illustrate using techniques from calculus how a bug travels along a certain path. We will also consider what occurs with certain obstacles and animate the movement using the Maple Software.

LAW 4900H: Senior Legal Seminar Honors
Prof. Mary Sue Donsky

Cherise Ahay – The “Carthage”
(Joseph Smith Murder) Trial
Michael Alicea – The John Brown Trial
Thania Barbecho – The Dakota Conflict Trials
Anson Carter – The Wyatt Earp (OK Corral) Trial
Yewande Decker – The Thaw (White Murder) Trials
Verhay Gill-Lewis – The Leo Frank Trial
Samantha Jeffrey – The Al Capone Trial
Belinda Lovelace – The Massie Trials
Sasha Mcduffie – The Alger Hiss Trials
Keran Perers – The Sam Sheppard Trials
Albana Taragjini – The Emmett Till Murder Trial
Terel Watson – The Patty Hearst Trial
Georgette Wright – The Dan White Trial
Danbi Yan – The Falwell v. Flynt Trial

Abstract:

Each student researched one of the most famous trials in American history. They were required to use primary and secondary authority to prepare papers, oral presentations and posters about their trial.



Fire Department of NY Fire Zone - February 24, 2012

HONORS SCHOLARS PROJECTS

Small Business Network Model

Shamsan Ahmed
Prof. Tim Assam and Prof. Ossama Elhadary
CST 1100: Introduction to Computer Systems

Using SDLC to Ensure a Well Constructed Website

Mohamed Ali
Prof. Marcos Pinto
CST 3519: XML Document Representation

The Printing Press and the Rise of a Literate Generation

Elaina Amesquita
Prof. Geoff Zylstra
HIS 3209: History of Technology

Why the Language Arabic for the Quran?

Mohammed Amin
Prof. Abdessadek Boumahchad
ARB 1101: Elementary Arabic I

Designing for Disaster: Shelter Evolution

Linda Bardhi
Prof. Illya Azaroff
ARCH 3611: Theoretical Design

Camelback Truss Bridge

Avhigit Bose
Prof. Anthony Cioffi
CMCE 1204: Statistics and Strength of Materials II

Lifestyle Factors, Nutrition and Oral Cancer

Louise Brown
Prof. Gwen Cohen-Brown and Prof. Laina Karthikeyan
BIO 3524: Nutrition

Estoppel in a DNA World

Danny Cabrera
Prof. Sara Schechter
LAW 2303: Family Law

Study of Hudson River Competition Using Cluster Analysis

Sultan Chowdhury
Prof. Urmi Ghosh-Dastidar
MAT 2580: Introduction to Linear Algebra

Study of Hudson River Competition Using Cluster Analysis

Edward Chung
Prof. Urmi Ghosh-Dastidar
MAT 2580: Introduction to Linear Algebra

Camelback Truss Bridge

Tiago Destefani
Prof. Anthony Cioffi
CMCE 1204: Statistics and Strength of Materials II

Volumes of Revolution by Way of Maple

Juliet Dramadri
Prof. Satyanand Singh
MAT 1575: Calculus II

Secure Distributed Data Storage and Retrieval

Netanel Halili
Prof. Eric Sabbah
CST 3613: Advanced Object Oriented Programming in JAVA

Scrabble with Artificial Intelligence

Netanel Halili
Prof. Douglas Moody
CST 3508: Design of Graphic User Interfaces

Study of Hudson River Competition Using Cluster Analysis

Adam Humm
Prof. Urmi Ghosh-Dastidar
MAT 2580: Introduction to Linear Algebra

The Effect of Tea on the Oral Cavity

Mariya Kostova
Prof. Maria-Elena Bilello
DEN 1200: Principles of Dental Hygiene Care II

Ways to Improve Profit and Profitability for the Dental Lab Owner

Avindra Lal Maharaj
Prof. Renata Budny
RESD 1212: Fixed Prosthodontics II

The Impact of Technology on NYC Education System

Brittany Lallkissoo
Prof. Barbara Kitai
ENG 1121: English Composition II

Critically Analyzing the Significance of "Patient Zero" to the Early Spread of HIV/AIDS

Rebecca Langer
Prof. Eric M. Rodriguez
PSY 3405: Health Psychology

Nobel BioCare CAD/CAM System

Lawrence Lee
Prof. Renata Budny
RESD 1212: Fixed Prosthodontics II

Evaluating Weird Science Case Studies

Liza Lei Luboa
Prof. Reneta D. Lansiquot
ENG 1773: Weird Science: Interpreting and Redefining Humanity

Electronic Discovery

DialloRafik Madison
Prof. Lise Hunter
LAW 4701: Law Office Management

Estoppel Challenges in a DNA World

DialloRafik Madison
Prof. Sara Schechter
LAW 2303: Family Law

Lifestyle Factors, Nutrition and Oral Cancer

Lisa Mathurin
Prof. Gwen Cohen-Brown and Prof. Laina Karthikeyan
BIO 3524: Nutrition

Veneers: An Option for Cosmetic Restorations

Gale Matthews
Prof. Renata Budny
RESD 1212: Fixed Prosthodontics II

Understanding Alzheimer's Disease: Dominantly Inherited Alzheimer's Disease Network (DIAN)

Danique McFarlane
Prof. Niloufar Haque
BIO 2311L: Human Anatomy and Physiology I Lab

Camelback Truss Bridge

Marcelo Moreira
Prof. Anthony Cioffi
CMCE 1204: Statistics and Strength of Materials II

The Advent of Gay Marriage and Evolution of Paternal Estoppel in New York

Avinash Nandlal
Prof. Sara Schechter
LAW 2303: Family Law

Reflections on Self Motivation and Success!

Giovanny Ramirez
Prof. Niloufar Haque
BIO 2311: Human Anatomy and Physiology I

Artificial Sweeteners: The Sour Reality Behind Sweets

Melissa Rodriguez
Prof. Cinda P. Scott
BIO 1101: Biology I

Career and Technology Teacher Education Promotional Video

Genny Sanchez
Prof. William E. Roberts
EDU 2460: Communications Systems

Fluent Modeling of Tsunami Impact on Bridges

Carlos Santana
Prof. Gerarda M. Shields
CMCE 2351: Fluid Mechanics

Dynamics of Dipole Excitons in Coupled Quantum Wells

Zeeshan Saroya
Prof. Oleg Berman
PHYS 1442: Physics 2.3

Volumes of Revolution by Way of Maple

Jon Singer
Prof. Satyanand Singh
MAT 1575: Calculus II

Lifestyle Factors, Nutrition and Oral Cancer

Tracey Smith
Prof. Gwen Cohen-Brown and Prof. Laina Karthikeyan
BIO 3524: Nutrition

Emerging Infectious Diseases: Avian Influenza

Darice Solis
Prof. William Chan
BIO 3302: Microbiology

Optimization of Solvent and Dispersant Systems for Formulation of NiO Inks for Solid Oxide Fuel Cell Fabrication

Jay Sooknanan
 Prof. Lazarus Jay Deiner
CHEM 3412: Instrumental Analysis

Architectural Portfolio

Annette Sheila Veliz
 Prof. William Valdez
ARCH 1291: Visual Studies II

Huntington's Disease – Huntington Chorea

Natalia Vergara
 Prof. Niloufar Haque
BIO 2311L: Human Anatomy and Physiology I Lab

Designing for Disaster: Shelter Evolution

Dunda Vladyslav
 Prof. Illya Azaroff
ARCH 3611: Theoretical Design

Designing for Disaster: Shelter Evolution

Takao Watanabe
 Prof. Illya Azaroff
ARCH 3611: Theoretical Design

The Effectiveness of Physical Therapy on Patients with Osteoarthritis

Aruna Woods
 Prof. Niloufar Haque
BIO 2312: Human Anatomy and Physiology II

The Representation of Native Americans in the Words of Sherman Alexie

Tomer Yakov
 Prof. Thomas Wilk
ENG 2000: Perspectives in Literature

The Truth About the “Dark Lady” in Sonnet #127

Tomer Yakov
 Prof. Frank Dezego
SPE 1340: Oral Interpretation of Literature

Sleep and the Unconscious Mind

Shadiyah Zanta
 Prof. Niloufar Haque
BIO 2311: Human Anatomy and Physiology I

Eye Tracking of Social Desirable Responding on Personality Inventories under Different Instructional Sets

Rehmaan Abdul
 Prof. Howard Sisco

Mean Field Approaches for Bose-Einstein Condensation and Super-Fluids

Ishtahad Ahmed
 Prof. Oleg Berman

The Effects of Peer-Led Team Learning Workshops on Undergraduates Enrolled in a College Algebra and Trigonometry Course

Mursheda Ahmed
 Prof. Janet Liou-Mark

An Independent Research Project about the Number 0

Musaib Ahmed
 Prof. Jonas Reitz

Where is My Moon?

Frank Aline
 Prof. Delaram Kahrobaei

Emotional Stress, Meaning-Making and Well-Being

Pascal Babmatee
 Prof. Jean Kubeck
 Prof. Pa Her

Designing for Disaster: Shelter Evolution

Linda Bardhi
 Prof. Illya Azaroff

Creation of a Sun Power Device

Dimitri Bazin
 Prof. Andy Zhang

Local versus General Anesthesia in Surgery: Relative Effectiveness, Drugs Used in Intra-Operative and Post Operative Effects

Rashauna Blake
 Prof. Olufemi Sodeinde

Where is My Moon?

Amelise Bonhomme
 Prof. Delaram Kahrobaei



Ice Skating - December 27, 2011



Cultivating Fine Dining Etiquette, Prof. Karen Goodlad
 March 13, 2012

Eye Tracking of Social Desirable Responding on Personality Inventories under Different Instructional Sets

Rashaan Bowrey
Prof. Howard Sisco

Lifestyle Factors, Nutrition and Oral Cancer

Louise Brown
Prof. Laina Karthikeyan
Prof. Gwen Cohen-Brown

A Simulation Model for the Spread of Swine Flu Pandemic

Alma Cabral-Reynoso
Prof. Boyan Kostadinov
Prof. Liana Tsenova

Designing for Disaster: Shelter Evolution

Marsha- Ann Cadougan
Prof. Ilyia Azaroff

Where is My Moon?

Damon Cham
Prof. Delaram Kahrobaei

Study of Hudson River Competition Using Cluster Analysis

Patrick Chen
Prof. Urmi Ghosh-Dastidar

Study of Hudson River Competition Using Cluster Analysis

Sultan Chowdhury
Prof. Urmi Ghosh-Dastidar

Study of Hudson River Competition Using Cluster Analysis

Edward Chung
Prof. Urmi Ghosh-Dastidar

Super-Fluidity of Dipole Excitons in the Presence of Band Gaps in Two-Layer Grapheme

Garret Cortese
Prof. Oleg Berman

Chronicling the Achievements and Activities of Honors Scholars at City Tech

Tamrah Cunningham
Prof. Reneta D. Lansiquot
Prof. Janet Liou-Mark

Computer Algebra Systems for Particle Physics: SAGE

Samuel Delegado
Prof. Andrea Ferrogli

Designing for Disaster: Shelter Evolution

Vladyslav Dunda
Prof. Ilyia Azaroff

How Nervous System Functioning is Altered by the Immune System in Autoimmune Diseases?

Elizabeth Espinoza
Prof. Andleeb Zameer

Propagation of Long-Lifetime Polaritons under the Action of an External Constant Force

Ricardo Ferro
Prof. Oleg Berman
Prof. German Kolmakov

OSHA Standards for Safety and Computing

Daniel Frederick
Prof. Robert Leston

Redefining Humanity in a Virtual World

Elaine Green
Prof. Reneta Lansiquot

A Comprehensive Overview of Parkinson's Disease: Pathogenesis, Current Treatments and Cure

Victor He
Prof. Laina Karthikeyan

Turbulence in Bose-Einstein Condensates of Dipolar Excitons in Coupled Quantum Wells

Victor He
Prof. Oleg Berman
Prof. German Kolmakov

Numerical Study of the Dynamics of Compliant Microcapsule on an Adhesive Substrate

Fernando Hernandez
Prof. German Kolmakov

Disrupting Chemicals in the Environment and Its Effect on Human Reproductive Axis

Yashira Henriquez
Prof. Sanjoy Chakraborty

Designing for Disaster: Shelter Evolution

Bryan Hou
Prof. Ilyia Azaroff

Computer Algebra Systems for Particle Physics: SAGE

Salima Huseynova
Prof. Andrea Ferrogli

Propagation of Long-Lifetime Polaritons under the Action of an External Constant Force

Ervin Ibragimov
Prof. Oleg Berman
Prof. German Kolmakov

The Social Effects of IMF Programs: Jamaica in the Late 1970's and Greece in the 2010's

Natalie Jones
Prof. Costas Panaytakis

Where is My Moon?

Travion Joseph
Prof. Delaram Kahrobaei

Combating Bullying in Nursing

Ruchoma Kaganoff
Prof. Elaine Leinung
Prof. Aida Egues

Study of Hudson River Competition Using Cluster Analysis

Samuel Karasik
Prof. Urmi Ghosh-Dastidar

Noel Field, the Cold War and Mythical Field Family Conspiracy

George Kobakhidze
Prof. Kyle Cuordileone

Environmental Sound Level Measurements and Hearing Loss

Rebecca Kogan
Prof. Vasily Kolchenko
Prof. Lisette Stern

Noel Field, the Cold War and Mythical Field Family Conspiracy

Ewelina Kosmaczewska
Prof. Kyle Cuordileone

Critically Analyzing the Significance of “Patient Zero” to the Early Spread of HIV/AIDS

Rebecca Langer
Prof. Eric Rodriguez

Formation of Water Nano-Clusters in Helium Atmosphere at Low Temperatures

Marcus Lolo
Prof. German Kolmakov

A Simulation Model for the Spread of Swine Flu Pandemic

Steven Lora
Prof. Boyan Kostadinov
Prof. Liana Tsenova

A Study on the Effects of Undergraduates Who Facilitate Peer Assisted Learning Workshops in Mathematics

Connie Lu
Prof. Janet Liou-Mark

Computer Algebra Systems for Particle Physics: SAGE

John Martinez
Prof. Andrea Ferrogli

Lifestyle Factors, Nutrition and Oral Cancer

Lisa Mathurin
Prof. Laina Karthikeyan
Prof. Gwen Cohen-Brown

Super Fluidity of Polaritons Formed by Excitons in Gapped Grapheme

Lenin Mendez
Prof. Oleg Berman

Designing for Disaster: Shelter Evolution

Lizeth Molina
Prof. Illya Azaroff

Is Tolerance for Anesthesia a Function of Age, Body Type and Gender?

Jeffrey Mongal
Prof. Olufemi Sodeinde

Chronicling the Achievements and Activities of Honors Scholars at City Tech

Venezia Moorer
Prof. Reneta D. Lansiquot
Prof. Janet Liou-Mark

Inter-Particle Interactions in Exciton Condensates vs. Atomic Condensates

Pablo Mota
Prof. Oleg Berman

Chronicling the Achievements and Activities of Honors Scholars at City Tech

Hiba Nafe
Prof. Reneta D. Lansiquot
Prof. Janet Liou-Mark

Designing for Disaster: Shelter Evolution

Hibe Nafe
Prof. Illya Azaroff

Emotional Stress, Meaning-Making and Well-Being

Karen Neroulias
Prof. Jean Kubeck
Prof. Pa Her

Environmental Sound Level Measurements and Hearing Loss

Tenzin Palma
Prof. Vasily Kolchenko
Prof. Lisette Stern

Microbial Diversity in the Gowanus Canal

Kenneth Paneto
Prof. Nasreen Haque



Dia: Beacon - March 21, 2012



Brooklyn Historical Society - April 23, 2012

Chemokines in Cancer

Brittany Paquette
Prof. Nasreen Haque

Designing and Programming Three-Dimensional Geosciences Virtual Modules

Brian Persaud
Prof. Reneta D. Lansiquot

Elementary Particles at the Large Hadron Collider

Alma Plaku
Prof. Giovanni Ossola

Neurological Diseases and Related Disorders

Addler Pluaise
Prof. Niloufar Haque

Chronicling the Achievements and Activities of Honors Scholars at City Tech

Walter Rada
Prof. Reneta D. Lansiquot
Prof. Janet Liou-Mark

A Simulation Model for the Spread of Swine Flu Pandemic

Syedhamidreza Sadatian
Prof. Boyan Kostadinov
Prof. Liana Tsenova

Are We More Microbes Than Human Cells?

Sajata Saluja
Prof. Nasreen Haque

Career and Technology Teacher Education Promotional Video

Genny Sanchez
Prof. William E. Roberts

Mean Field Approaches for Bose-Einstein Condensation and Super-Fluids

Zeeshan Saroya
Prof. Oleg Berman

A Simulation Model for the Spread of Swine Flu Pandemic

Bojkena Selmanaj
Prof. Boyan Kostadinov
Prof. Liana Tsenova

Lifestyle Factors, Nutrition and Oral Cancer

Tracey Smith
Prof. Laina Karthikeyan
Prof. Gwen Cohen-Brown

Designing for Disaster: Shelter Evolution

Eric Soltan
Prof. Illya Azaroff

Optimization of Solvent and Dispersant Systems for Formulation of NiO inks for Solid Oxide Fuel Cell Fabrication

Jay Sooknanan
Prof. Jay Deiner

Neurological Diseases and Related Disorders

Gergana Uzunova
Prof. Niloufar Haque

Designing for Disaster: Shelter Evolution

Takao Watanabe
Prof. Illya Azaroff

Noel Field, the Cold War and Mythical Field Family Conspiracy

Katarzyna Wojdyla
Prof. Kyle Cuordileone

Neurological Diseases and Related Disorders

Aruna Woods
Prof. Niloufar Haque

Disrupting Chemicals in the Environment and Its Effect on Human Reproductive Axis

Tomer Yakov
Prof. Sanjoy Chakraborty

Self-Efficacy and Attitudes towards Mathematics of Undergraduates in a Technical College: A United States and Taiwan Comparison

Karmen Yu
Prof. Sandie Han
Prof. Janet Liou-Mark

Infinite Real Estate in Hyperbolic Space

Yi Ming Yu
Prof. Satyanand Singh

Pathogenesis of Parkinson's Disease

YiMing Yu
Prof. Laina Karthikeyan

Where is My Moon?

Yi Ming Yu
Prof. Delaram Kahrobaei

Self-Efficacy and Attitudes towards Mathematics of Undergraduates in a Technical College: A United States and Taiwan Comparison

Suhua Zeng
Prof. Sandie Han
Prof. Janet Liou-Mark

Where is My Moon?

Suhua Zeng
Prof. Delaram Kahrobaei

Propagation of Long-Lifetime Polaritons under the Action of an External Constant Force

Dmitry Zutikov
Prof. Oleg Berman
Prof. German Kolmakov

LEARNING COMMUNITIES THEME-BASED PROJECTS

The Mathematics of Site Planning

Tasnuva Ahmed, Liyuwork Ayalev, Nataly Bautista, Jose Bello, Kevin Bonifacio, Gianfranco Calderon, Gracy Dubon, Elvio Gimenez, Victor Green, Jonathan Hernandez, Stephanie Jackson, Raynard Landell, Marlenn Lopez, Miguel Olivares, and Eric Thrugood

Prof. Paul C. King

ARCH 1250: Applied Environmental Studies



Live with Kelly - January 11, 2012



NYSMATYC Conference, Ellenville, New York - March 21, 2012

SPECIAL PROJECTS

Ways to Improve Profit and Profitability for the Dental Lab Owner

Astrid Araujo
Prof. Renata Budny

Why We Dream: Reason, Causes and Evaluation

Xiaodeng Chen
Prof. Nasreen S. Haque and Prof. Niloufar Haque

IPS e-maxpressable vs IPS e-max CAD/CAM

Noeli Mejia
Prof. Renata Budny

Understanding Osteoarthritis and Musculoskeletal System

Brenda Nathan
Prof. Nasreen S. Haque and Prof. Niloufar Haque

The Importance of Autoimmune Diseases and Its Effects on the Central Nervous System and the Brain

Gael Seraphin
Prof. Nasreen S. Haque and Prof. Niloufar Haque

“Implants”

Lorana Sukhnandan
Prof. Renata Budny

Sleep Apnea: How Snoring So Loud Can be a Sign of a Serious Disorder

Mirasol Sukhu
Prof. Nasreen S. Haque and Prof. Niloufar Haque

Casino Style BlackJack

Mursheda Ahmed, Amelise Bonhomme, Christopher Chan, Patience Christopher, Yuxi Han, Owen Hewitt, Ali Javid, Johnathan Jimenez, Edmund Joseph, Ali Khan, Ardenis Nikolli, Juan Rijo, Seyedhamidreza Sadatan, Faith Tamisi, Christina Valore and Suhua Zeng
Prof. Satyanand Singh
MAT 3672: Probability and Mathematical Statistics II

Climate Change Impacts on Water Resources

Joseph Gordon, Yomaris Estrella, Mariya Argirova, Maria Sideris, Bikram Khadka, Brian Febo
Prof. Reginald Blake
PHYS 1112: Principles of Science II

Climate Change Impacts on Health

Crystal Lin, Anderson Goberdhan, Luis Arnaud, Dalem Tjok, Arsa Artha, Shaquana Frazier
Prof. Reginald Blake
PHYS 1112: Principles of Science II

Climate Impacts on Energy

Elizabeth Ubinas, Temah Harrison, Raymond Lamothe, Sarah Beyroute, Roy Vasquez
Prof. Reginald Blake
PHYS 1112: Principles of Science II

**The Mechatronics Technology Project
STEP Academy and NSF ATE Grant:
DUE # 1003712**

STEP Advisor: Ms. Ivonne Barreras

Constructive Robeemakers

Eduardo Arguello, Adrian Ayuso, Thomas Dickson,
Rama Sagna
Prof. Iem Heng and Prof. Andy Zhang

**NSF Louis Stokes Alliance for Minority
Participation (LSAMP) Program**

Program Coordinator: Ms. Minerva Francis

App Development in Android

Mahamudul Abedin
Prof. Aparicio Carranza
CET 4982: Special Project Technology

**Canadian Fire Emissions Detected by
Remote Sensing and in situ Measurements
During the 2011 IOP at BNL**

Antonio Aguirre
Prof. Viviana Vladutescu
EET 3132: Remote Sensing

Security Risk Solutions in Web Applications

Carla Araile
Prof. Aparicio Carranza
CET 4982: Special Project Technology

Cloud Computing and Security

Omar Baksh
Prof. Aparicio Carranza
CET 4982: Special Project Technology

**Developing a Micromechanical System
for OSTEON Isolation**

Jorge Bermeo
Prof. Gaffar Gailani

**Factors Affecting the Proton Exchange Membrane
Fuel Cell Characteristic Curve**

Yapah Berry
Prof. Malek Brahim
MECH 2340: Thermodynamics

Wireless Personal Area Networks (WPANs)

Abul Bhuiyan
Prof. Aparicio Carranza
CET 4982: Special Project Technology

Implementing Cryptography

Daniel Bui
Prof. Aparicio Carranza
CET 4982: Special Project Technology

Cryptographic Validity and Network Security

Harrison Carranza
Prof. Aparicio Carranza
CET 4982: Special Project Technology

**Miniature Quadcopter for
3D Environment Exploration**

Daniel Hulijev
Dr. Xiaohai Li
LSAMP & 2012 CUNY GRTI Grant

Network Virtualization for the Enterprise

Sengyeal Kang
Prof. Aparicio Carranza
CET 4982: Special Project Technology

Lidar Measurement of Urban Atmospheric Properties

Essossimna Kassang
Prof. Viviana Vladutescu
EET 3132: Remote Sensing

Ethical Questions in Globalizing Engineering

Rhonda Lee-Davis
Prof. Gerarda Shields
CMCE 1204: Statics and Strength of Materials II

Lidar Measurement of Urban Atmospheric Properties

Edwin Olaya
Prof. Viviana Vladutescu
EET 3132: Remote Sensing

**Security for Wireless Communication
Using Cryptography**

Viral Patel
Prof. Aparicio Carranza
CET 4982: Special Project Technology

**Miniature Quadcopter for 3D
Environment Exploration**

George A. Perez
Dr. Xiaohai Li
LSAMP & 2012 CUNY GRTI Grant

MOSIX2 Clustering

Jonathan Perez
Prof. Aparicio Carranza
CET 4982: Special Project Technology

**Factors Affecting the Proton Exchange Membrane
Fuel Cell Characteristic Curve**

Sean Pratt
Prof. Malek Brahim
MECH 2340: Thermodynamics

**Factors Affecting the Proton Exchange Membrane
Fuel Cell Characteristic Curve**

Olivia Reed
Prof. Malek Brahim
MECH 2340: Thermodynamics

Android App Development “Deus Ex Machina”

Rafael Rufino
Prof. Aparicio Carranza
CET 4982: Special Project Technology

**UV Biometer Instrument Used in the Calculation
of the UV Index in Brooklyn, NYC Area**

Agossa Segla
Prof. Viviana Vladutescu
EET 3132: Remote Sensing

Developing a Micromechanical System for Osteon Isolation

Salih Shameldin
Prof. Gaffar Gailani

Vmware ESX vs Microsoft Hyper-V

Harold Taveras
Prof. Aparicio Carranza
CET 4982: Special Project Technology

Research Experiences for Undergraduates in Satellite and Ground-based Remote Sensing at NOAA-CREST 2

NSF REU Grant # AGS-1062934
Prof. Reginald Blake and Prof. Janet Liou-Mark

Evaluation of Cloud-top Height Estimates from MODIS Cloud-top Pressure

Folashade Alawiye

Spectral Analysis of Soil Moisture Time Series

Amelise Bonhomme

Clustering Analysis for Cloud and Surface Type Classification

Andrew Cole

Restoring Images of Band-6 on MODIS-AQUA

Bangalee Dolley

All Fiber Based Coherent Doppler LIDAR

Abdul Jalloh

Validation of a Flash Flood Guidance System Using Observed Flood Data

Juan Mejia

A Study of Cloud Properties Using GOES Thermal Infrared Sensors

Xiaoqian Pan

Numerical Modeling of Wind Driven Water Flow

Hussain Rifat

Open-Path FTIR Applications to Aerosol Dynamics

Pyo Sunyoung

Early Comparative Analysis of Chlorophyll-a Concentration Algorithms for Use in Coastal Water Retrievals

Avani Ogwaro

Exploring DMSP (Defense Meteorological Satellite Program) SSM/T2: Measurements to Understand Atmospheric Water Vapor Distribution

Marsha Ann Cadougan

Preliminary Analysis: Electricity Consumption Changes in California

Yanelly Molina

MEDU 2901: Peer Leader Training in Mathematics

Metropolitan Mentors Network: Growing an Urban STEM Talent Pool across New York City

NSF STEP Grant #0622493, Black Male Initiative, Perkins VTEA, and MAA Tensor Foundation Women and Mathematics Grant

Prof. AE Dreyfuss

How is the Peer Leader experience enhanced through a community of practice?

Maureen Cauthen

Why are students in workshop able to complete modules but do not perform well on exams?

Jack Huang

What traits do Peer Leaders use to support their students?

Milica Jevtic

Why do students in workshop not like to ask questions?

Alex Yineng Liang

How can the Peer Leader support students' learning in workshop?

Connie Lu

What factors influence workshop students' motivation to succeed?

Fariyal Malik

What happens when students in mathematics hold on to problem-solving methods that are not working?

Shelford Mitchell

What types of interaction help students blossom through workshop in Statics I?

Marcelo Moreira

How can the Peer Leader help students' learning through questioning?

Jonathan Okoro

How can the Peer Leader help students in workshop trust their partner's knowledge?

Alma Plaku

How can female students in a math workshop increase their problem-solving capabilities?

Gendaris Tavera

How is teamwork a key to success in workshop?

Trung Tran



The 16th Semi-Annual Honors Scholars Poster Presentation

ACKNOWLEDGEMENTS

To all the dedicated professors for mentoring students, Interim Dean Karl Botchway, Ms. Laura Yuen-Lau, Ms. Iva Williams, Prof. Julia Jordan, Prof. Estela Rojas, Prof. Delaram Kahrobaei, Ms. Minerva Francis, Mr. George Lowe, Mr. Teddy Adolphe, and Mr. Jeff Novak, a heartfelt thank you for making this event a successful one.

A special thank you to the judges for the poster competition: Prof. Reginald Blake, Prof. Aida Egues, Ms. Minerva Francis, Prof. Reneta Lansiquot, Prof. Elaine Leinung, Prof. Cinda Scott, and Prof. Selwyn Williams

A special recognition and appreciation to Ms. Keiko Nakayama for designing the program.