The 23rd Semi-Annual Poster Presentation

Honors & Emerging Scholars Poster Presentation

Learning Communities Theme-Based Poster Presentation

Wednesday, December 2, 2015
11:00 AM - 4:00 PM
Atrium Ground & First Floors

Thursday, December 3, 2015
10:00 AM - 3:00 PM
Awards Ceremony at 12:30 PM
Atrium Amphitheater
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Awards Ceremony

December 3, 2015
Atrium Amphitheater
12:30 PM

Greetings
Russell K. Hotzler
President

Bonne August
Provost
Vice President for Academic Affairs

Honors Scholars Recognition
Janet Liou-Mark
Director of the Honors Scholars Program

Laura Yuen-Lau
Coordinator of the Honors Scholars Program

Research and Emerging Scholars Recognition
Pamela Brown
Associate Provost

Best Poster Awards
Reneta Lansiquot
Assistant Director of the Honors Scholars Program

Cultivating Fine Dining Etiquette
Prof. Karen Goodlad
October 6, 2015
Honors In A Regular Course

Canvas: Drawing Graphics and Creating Animations in the Browser
Hibba Abbas
Prof. Marcos Pinto
CST 4713: Dynamic Web Development: Servlets and JSP

Survival of the Pinkest: Breast Cancer in Young Women
Yasmin Abdallah
Prof. Zoya Vinokur
RAD 2325: Radiographic Procedures III

The Role of Sirtuins in T. Thermophila
Victor Adedara
Prof. William Lambert
BIO 3302: Microbiology

Cyber Crime and Strategic Security
Sara Aslam
Prof. Susan Serradilla-Smarth
CST 4700: IT Service Management

What Role Does Media Have on Stereotypes among College African American Males?
Aissatou Barry
Prof. Pa Her
SBS 2000: Research Methods for the Social and Behavioral Sciences

How Long Will You Live?
Lisa Carrillo
Profs. Asok Chaudhuri and Niloufar Haque
BIO 2311: Human Anatomy and Physiology I

Multiply Meanings of Graphic Symbols: Infograms for Anatomy and Physiology
Tristan Charran
Prof. Vasily Kolchenko
BIO 3350: Bioinformatics I

Bose-Einstein Condensation and Kinetics of Polariton Superfluid
Willie Cheung
Prof. Oleg Berman
PHYS 1442: General Physics II: Calculus Based

Connecting Mathematics Education to Social Issues: Design of Mathematical Tasks for Middle School Students
Saloua Daouki
Prof. Nadia Kennedy
MEDU 4010: Supervised Student Teaching and Seminar in Middle School Mathematics

What Happened to Leonardo’s Body? The Meaning of Anatomical Proportion in Modern Painting
Hailin Du
Prof. Michael McAuliffe
ARTH 1103: Survey of Art History
Diet with Higher Fat Calories and its Consequences on Mice
Bora Durrsi
Prof. Sanjoy Chakraborty
BIO 3526: Pathophysiology

Impact of the Affordable Care Act (ACA) on the Healthcare Workforce
Adaoma Ejimbe
Prof. Randall Hannum
ECON 1101: Macroeconomics

Chinatown Food Tour Website
Kendra Guo
Prof. Anthony Holley
CST 2309: Web Programming I

Time Expense and Saving (TES) Tracker
Kendra Guo
Prof. Ari Vega
CST 2301: Multimedia and Mobile Device Programming

Discovering the Core Essence of World Renowned Chefs
Ayako Hiratsuka
Prof. Robert Walljasper
HMGT 2303: Culinary Arts II

Measuring the Cost Effectiveness of Restaurant Tablets
Malika Ikramova
Prof. Edward Sanders
HMGT 1202: Food and Beverage Cost Control

Managing Human Resources in the Hospitality Industry
Malika Ikramova
Prof. Patrick O’Halloran
HMGT 1105: Lodging Operations Management

Survival of the Pinkest: Breast Cancer in Young Women
Beverley Khan
Prof. Zoya Vinokur
RAD 2325: Radiographic Procedures III

Salvation Behind the Closet Door
Felix Kurniawan
Prof. Eric Rodriguez
PSY 2402: Psychology of Personality

Rethinking Etiologies and Treatment of Neuropathology Based on the Meningeal Lymphatic System
Stella Lee
Prof. Niloufar Haque
BIO 2311: Human Anatomy and Physiology I
Analysis of a 1955-era Radio Frequency Generator and How a Unit of this Type could be Built Today
Jonathan Lockie
Prof. Viviana Vladutescu
EET 1202: Electrical Drafting

Computational Design of a Drug to Reverse the Effect of Alzheimer’s
Christopher Mason
Prof. Mai Zahran
BIO 3356: Molecular Modeling in Biology

Research Arduino Microcontroller Sensor and Motor Systems
Anne Menmou
Prof. Edward Morton
EMT 2320: Advanced Mechanisms

Using Mobile Communication to Reduce Maternal and Infant Mortality
Michelle Negron-Leon
Prof. Noemi Rodriguez
HSA 4740: Health Research Methods

Using Mobile Communication to Reduce Maternal and Infant Mortality
Michelle Negron-Leon
Prof. Karen Bonsignore
HSA 4620: Health Care Information Systems

Income, Consumption, Investment and Interest Rate in Relation to the Economy
Ijeoma Ozueh
Prof. Alemi Piruz
ECON 1101: Macroeconomics

File Encryption with Public Key Crypto System
Alla Polisskaya
Prof. Brad Isaacson
MAT 2440: Discrete Structures and Algorithms

Monte Carlo Simulation of Popular Trivia Game Mobile Application (TriviaCrack Stat)
Muhammad Qureshi
Prof. Douglas Moody
CST 2301: Multimedia and Mobile Device Programming

Connecting Mathematics Education to Social Issues: Design of Mathematical Tasks for Middle School Students
Rushdha Rafeek
Prof. Nadia Kennedy
MEDU 4010: Supervised Student Teaching and Seminar in Middle School Mathematics

The Political Economy of the 2008 U.S. Financial Crisis
Ahsun Rasool
Prof. Piruz Alemi
ECON 1101: Macroeconomics
James Joyce’s Self Portrayal in Dubliners: Routine of Everyday Life and the Effectiveness of the Coping Mechanisms
Ahsun Rasool
Prof. Carole Harris
ENG 2001: Introduction to Literature I Fiction

Web Application with Google Map API Web Service
Elvis Sanchez
Prof. Marcos Pinto
CST 4713: Dynamic Web Development: Servlets and JSP

Deriving Rainbows from Calculus
Robert Serrano
Prof. Lin Zhou
MAT 1475: Calculus I

Survival of the Pinkest: Breast Cancer in Young Women
Sylvia Shin
Prof. Zoya Vinokur
RAD 2325: Radiographic Procedures III

Monitoring and Controlling
Rupert Shrouder
Prof. Susan Serradilla-Smarth
CST 4800: Project Management

Storage Management
Rupert Shrouder
Prof. Susan Serradilla-Smarth
CST 4700: IT Service Management

Immigration and the Workforce: Does Immigration Help or Hurt the American Workforce?
Phillipa Williams
Prof. Megan Behrent
ENG 2000: Perspectives in Literature

Micro-molding Fabrication of Engineered Tissues
Xavier Williams
Prof. Ozlem Yasar
MECH 2322: Engineering Materials

Merchandise Planning and Control for a Fashion Start-Up
Ceyda Yildiz
Prof. Carol Brathwaite
MKT 1255: Merchandising Planning & Control

Honors Scholars Program Orientation
September 3, 2015
Advanced Design and Fabrication of Custom Prosthetic
Ehab Ahmad
Prof. Gaffar Gailani

Prediction of Hydrodynamic Vulnerability of Coastal Bridges to Extreme Storm Surges
Jonathan Akujobi
Prof. Gerarda Shields

Advanced Design and Fabrication of Custom Prosthetic
Muhammad Ameen
Prof. Gaffar Gailani

Advanced Design and Fabrication of Custom Prosthetic
David Amegavie
Prof. Gaffar Gailani

Advanced Design and Fabrication of Custom Prosthetic
Harold Barreto
Prof. Gaffar Gailani

Creating Active Learning Spaces in Virtual Worlds
Zianne Cuff
Prof. Reneta Lansiquot

Benefits of Expressive Writing: Improvements in Vagal Tone Over Time
Cherishe Cumma
Profs. Jean Hillstrom and Pa Her

Investigation of Scaffold Fabrication Techniques: Tissues Engineering for Reducing Medical Waste and the Environmental Impacts
Andres Delgado
Prof. Ozlem Yasar

Student’s Matchmaker: An Internship Finder
Hector Feliz
Prof. Marcos Pinto

3D Nutrient Delivery Network Fabrication for the Engineered Tissues
Eddy Garcia
Prof. Ozlem Yasar
Novel Materials for Photonics and Optoelectronics
Andy He
Prof. German Kolmakov

Re-visualizing Brooklyn Tech: Architectural Archeology and Virtual Land Development
Ikrash Khan
Prof. Alan Lovegreen

The Role of Calpains in Oxidative Stress
Robin Koiner
Prof. Ralph Alcendor

Advanced Design and Fabrication of Custom Prosthetic
Rachid Moumni
Prof. Gaffar Gailani

Study of Two-dimensional Transition Metal Dichalcogenide Semiconductors: MoS2, MoSe2, WS2, WSe2 and Implementation of Modern Physics Experiments in Undergraduate Laboratory
William Orton
Prof. Roman Kezerashvili

Lagrange and the Calculus of Variations
Yen Pham
Prof. Andrea Ferroglia

Prediction of Hydrodynamic Vulnerability of Coastal Bridges to Extreme Storm Surges
Jarren Sanderson
Prof. Gerarda Shields

Renewable Energy Conversion Technology
Ezra Stabler
Prof. Masato Nakamura

George Vanishvili
Prof. Masato Nakamura

Fabrication of Engineered Tissues with Micro-Molding
Xavier Williams
Prof. Ozlem Yasar
Emerging Scholars

Canvas: Drawing Graphics and Creating Animations in the Browser
Hibba Abbas
Prof. Marcos Pinto

Survival of the Pinkest: Breast Cancer in Young Women
Yasmin Abdallah
Prof. Zoya Vinokur

Optimizing Distance-dependent Long-range Interactions in Protein Structure
Sajjad Abedian
Prof. Armando Solis

Implementing an Online Quiz with Countdown Timer
Joe Nathan Abellard
Prof. Marcos Pinto

The Role of Sirtuins in T. Thermophilia
Victor Adedara
Prof. Ralph Alcendor

The Virtual Alpha Carbon Description in Protein Structure Analysis
Warner Alexis
Prof. Armando Solis

Selling Privacy in Social Media Networks
Ahmad Ali
Prof. Robert Leston

Survival of the Pinkest: Breast Cancer in Young Women
Amairani Amaro
Prof. Zoya Vinokur

Modernizing Legacy Java Applications through Automated Refactoring
Md Arefin
Prof. Raffi Khatchadourian

Understanding the Important Interaction between VEGFD and its Receptors
Sofia Azizi
Prof. Mai Zahran

Paint’s Antimicrobial Properties Tested with Staphylococcus Epidermidis
William Bennett
Prof. Jeremy Seto

Understanding the Important Interaction between VEGFD and its Receptors
Najma Bibi
Prof. Mai Zahran
Chronicling the Achievements and Activities of Honors Scholars at City Tech
Savannah Blodgett
Prof. Reneta Lansiquot

Organizational Planning and Evaluating within the Hospitality Industry
Jovany Bravo
Prof. Patrick O’Halloran

The Legal Concepts and Societal Concerns Related to Security Issues
Michelle Cantos
Prof. Patrick O’Halloran

Chronicling the Achievements and Activities of Honors Scholars at City Tech
Juan Carpinteiro
Prof. Reneta Lansiquot

Understanding the Important Interaction between VEGFD and its Receptors
David Carvajal
Prof. Mai Zahran

A Vegetable Based pH Sensor
Jason Challenger
Prof. Nathan Astrof

Multiply Meanings of Graphic Symbols: Infograms for Anatomy and Physiology
Tristan Rashad Charran
Prof. Vasily Kolchenko

Bose-Einstein Condensation and Kinetics of Polarization Superfluid
Willie Cheung
Prof. Oleg Berman

Efficient Noise Filtering for Big Data
Rosemary Chinchilla
Prof. Ashwin Satyanarayana

The Relationship between Communication and Guest Services in the Hospitality Industry
Blanca Cortes
Prof. Patrick O’Halloran
Mathematical Modeling with Middle School Students: Exploring Impact
Saloua Daouki
Profs. Nadia Kennedy and Ariane Masuda

Optical Processing Characteristics in a Clinical Psychiatric Sample
Rafael De Jesus
Prof. Daniel Capruso

Mechanics and Biomaterials of Tissue Scaffolds
Andres Delgado
Prof. Ozlem Yasar

Developing a New Pedagogy for Experiencing Mechatronics
Darya Dubouskaya
Prof. Muhammad Ummy

Diet with Higher Fat Calories and its Consequences on Mice
Bora Durrsi
Prof. Sanjoy Chakraborty

Protein Stucture Analysis and Prediction
Nataliya Ferdinand
Prof. Armando Solis

Using Next Generation Sequencing Technology to Eludicate Microorganisms
Fabiola Fontaine
Prof. Jeremy Seto

Characterization of Auphylococci from Built Environment
Manuela Hoyos Giraldo
Prof. Jeremy Seto

Benefits of Expressive Writing: Improvements in Vagal Tone Over Time
Dana Glatzer
Profs. Jean Hillstrom and Pa Her

Oral Cancer Diagnosis and Emerging Medical Technologies
Nephtali Guillomaitre
Prof. Laina Karthikeyan

Running Simultaneous Javascripts with Web Worker
Preeti Gurung
Prof. Marcos Pinto

Diet with Higher Fat Calories and its Consequences on Mice
Devya Gurung
Prof. Sanjoy Chakraborty

Copper Binding Properties of Multi-target Compounds
Sarah Hambleton
Prof. Alberto Martinez

PCR Typing of the SCCmec Types
Abdul Haq
Prof. Jeremy Seto
Molecular Characterization of Deep-sea Black Corals
Clyde Harris
Prof. Mercer Brugler

Comparison of Free Vulnerability Scanners
Nolan Hu
Prof. Arup Das

Understanding the Important Interaction between VEGFD and its Receptors
Veronica Hurtado
Prof. Mai Zahran

Managing Human Resources in the Hospitality Industry
Malika Ikramova
Prof. Patrick O’Halloran

Teaching Religious Tolerance in an Age of Contention
Rafshanur Islam
Prof. Mark Noonan

The Role of Sirtuins in T. Thermophilia
Omolaja Kabir
Prof. Ralph Alcendor

Survival of the Pinkest: Breast Cancer in Young Women
Beverley Khan
Prof. Zoya Vinokur

Toward a Publication-ready Model of Protein Kinase A
Elizabeth Kolmus
Prof. Mai Zahran

Salvation Behind the Closet Door
Felix Kurniawan
Prof. Eric Rodriguez

Optimizing Local Structure Distribution in Protein Structure Analysis and Prediction
Cristina Lai Zheng
Prof. Armando Solis

Neurological Diseases and Neurotherapy
Stella Jung Lee
Prof. Niloufar Haque

Diet with Higher Fat Calories and its Consequences on Mice
Nicole Madrazo
Prof. Sanjoy Chakraborty

Sustaining an Online Writing Program
Ricky Martinez
Prof. Reneta Lansiquot

Understanding the Important Interaction between VEGFD and its Receptors
Christopher Mason
Prof. Mai Zahran
Bose-Einstein Condensation and Kinetics of Polariton Superfluid
Oswaldo Minchala
Prof. Oleg Berman

Behavioral Neuroscience
Sheila Moaleman
Prof. Niloufar Haque

Advancing Microbes
Linalee Moreira
Prof. Elaine Leinung

Teaching Religious Tolerance in an Age of Contention
Samiul H. Mozumder
Prof. Mark Noonan

Mechanics of Tissue Scaffolds
Arturo Axel Murillo
Prof. Ozlem Yasar

The Role of Sirtuins in T. Thermophilia
Faaez Nafiu
Prof. Ralph Alcendor

Telemedicine to Improve Maternal/Infant Health Outcomes
Michelle Negron-Leon
Prof. Karen Bonsignore

Proposal for the Reintegration of Public Housing in New York City
Cindy Ocasio
Profs. Ting Chin and Jason Montgomery

Different Aspects of Web Application
Khadijah Okoh
Prof. Marcos Pinto

Fractional Calculus Differential Equations
Yen Pham
Prof. Satyanand Singh

Characterization of Auphylococci from Built Environment
Valentina Pineda
Prof. Jeremy Seto

Spherical Crash-free Aerial Craft
Tenzing Rabgyal
Prof. Xiaohai Li

Advancing Library Research Techniques
Prof. Anne Leonard
October 15, 2015
Mathematical Modeling with Middle School Students: Exploring Impact
Fathima Rafeek
Profs. Nadia Kennedy and Ariane Masuda

Teaching Religious Tolerance in an Age of Contention
Anika Rahnum
Prof. Mark Noonan

Chronicling the Achievements and Activities of Honors Scholars at City Tech
Mariah Rajah
Prof. Reneta Lansiquot

Document and Design
Hito Rodriguez
Prof. Lia Dikigoropoulou

Benefits of Expressive Writing: Improvements in Vagal Tone Over Time
Daniel Rosales
Profs. Jean Hillstrom and Pa Her

The Impression of Grand Architecture on Psychological Health and Being
Zakarya Samih
Prof. Michael Duddy

Chronicling the Achievements and Activities of Honors Scholars at City Tech
Jessica Samide
Prof. Reneta Lansiquot

Web Application with Google Maps API Web Services
Elvis Sanchez
Prof. Marcos Pinto

Case Studies: Site Analysis Red Hook NYC
Ekaterina Sanko
Prof. Lia Dikigoropoulou

A Comparison between Gas-phase and Stellar Metallicity in SDSS Galaxies
Roberto Serrano
Prof. Viviana Acquaviva

Molecular Characterization of Deep-sea Black Corals
Abraham Setiawan
Prof. Mercer Brugler

Survival of the Pinkest: Breast Cancer in Young Women
Sylvia Shin
Prof. Zoya Vinokur

Design and Manufacturing of a Remote Controlled Mobile Robot
Eliyahu Shtauber
Prof. Angran Xiao
Chronicling the Achievements and Activities of Honors Scholars at City Tech
Jodieann Stephenson
Prof. Reneta Lansiquot

Investigation of Scaffold Fabrication Techniques: Tissue Engineering
Joyce Tam
Prof. Ozlem Yasar

Chronicling the Achievements and Activities of Honors Scholars at City Tech
Jane Michelle Tan
Prof. Reneta Lansiquot

Document and Design
Claudia Tupayachi
Prof. Lia Dikigoropolou

The Role of Sirtuins in T. Thermophilia
Masood Usman
Prof. Ralph Alcendor

Simulation of Performative Envelope
Lu Chang Wang
Prof. Jihun Kim

Different Aspects of Web Application
Shanice Williams
Prof. Marcos Pinto

Different Aspects of Web Application
Gwenneth Worthy
Prof. Marcos Pinto

Investigation of Scaffold Fabrication Techniques: Tissue Engineering
Meleha Yousaf
Prof. Ozlem Yasar

National Society of Collegiate Scholars 2015 - 2016
Officers Charter Members (Prof. Lansiquot and Ms. Jones-Morton)
Advisors (Profs. Samaroo and Liou-Mark, Ms. Yuen-Lau)
Learning Communities
Theme-Based Projects

How Math Talks to Us:
Connecting the Languages of Symbols and Words
Sana Abdul, Roserie Adjodha, John Arevalo, Meghan Brown, Javaughn Farquharson, Dominique Francis, Amber Fraser, Solenny Garcia, Marigona Haxhaj, Monica Haye, Joselito Hernandez, Miguel Hierro, Nadira Kibria, Joshua Lumsden, Anilda Martinez, Nida Niaz, Jamie Nichols, Miftaah Pirzada, Prescilla Ramcharran, Mairelis Ramirez, Jonathan Smith, Jonathan Tabet
Profs. Ariane Masuda and Suzanne Miller
MAT 0650: Elementary Algebra
ENG 1101: English Composition I

Taste the World
Guoxiong Lin, Zifeng Liu, Bao Ying Zhang, Dexuan Zhen
Profs. Karen Goodlad, Michael Krondl and Laura Westengard
HMGT 1101: Perspectives in Hospitality Management
HMGT 1102: Introduction to Food and Beverage Management
ENG 1101: English Composition I

A View From Above: Writing and Visualizing Architectural Design
Cory Breegle
Profs. Alan Lovegreen and Ramsey Dabby
ENG 1101: English Composition I
ARCH 1110: Architectural Design I: Foundations
ARCH 1191: Visual Studies I
Ways of Seeing: Adventures with Image and Text
Leonardo Barrales, Mirza Brackan, Marcus Ceron, Klever J Cobena, Ashley Fernandez, Jingyi Jiao, Jaichan Kirty, Romie Evander P Marcos, Brian K Mifsud, Ayano Morishima, Devin Morris Fields, Jason Murillo, Eftekar Nasser, Brandy E Ortiz, Khandaker Rishalatullah, Tyler Santiago, Ka Yee Tsang, Arthur E Tyce, Jimmel A Worrell, Xingfu Ye, Ying Yang Zhang
Profs. Jody Rosen and Jenna Spevack
ENG 1101: English Composition I
COMD 1100: Graphic Design Principles I

An Exploration of Effective Mathematics Pedagogy
Daniela Amigon, Sanaya Brown, Marina Felamon, Joshua Grillasca, Darnell James, Latina Laing, Justin Meyer, Rafael Regalado, Farjana Shati, Jian Sun, Samuel Wong, Noura Yasin
Profs. Andrew Douglas and Estela Rojas
MEDU 2010: Technology in Mathematics Education
MEDU 3011: Methods of Teaching Middle School Mathematics

Commonalities of Our Cultures
Aiyda Alshohatee, Ronaldo Carhuaricra, Kimberly Catorce, Anthony Gaudio, Marr Morel, Timothy Muroe, Marko Nedeljkovic, Kabir M Rafshan, Lovepreet Singh, Melissa Zephyr
Profs. Annie Ngana-Mundeke and Chandra Young
AFR 1130: Africana Folklore
ENG 092R: Developmental Reading Level II

University of Texas LSAMP Conference
September 11-12, 2015
Developing and Delivering Effective Research Poster Presentations
Prof. Jody Rosen
October 29, 2015
Special Projects

Liberal Arts Students: Establishing an Identity
Mandy Mei, Graphic Design Intern, Faculty Commons Design Team
Prof. Julian Williams, Liberal Arts Program Director

Abstract: How do Liberal Arts and Sciences students identify? This question led me to research the origins of the liberal arts. The Liberal Arts branding project establishes an identity for the program and its students by using print and web tools. The ultimate goal is to create a community where students can seek advisement and make informed choices based on the options and opportunities provided.

Water Resource Management of Fairview Lake
CMCE 2454: Applied Hydraulics
Prof. Gerarda Shields

Abstract: A sample project site was selected in Tafton, PA. Students analyzed, designed and managed the water resources found in Fairview Lake and the surrounding watershed. First, the watershed was delineated and the amount of available water determined. A computer model was developed to route the water through the stream to determine flow and velocity. Students then designed a basic drinking water and wastewater treatment system for the community using the resources from the lake and stream.

National Society of Collegiate Scholars Induction Ceremony
October 22, 2015
Graph Theoretic Explorations Part I
Christopher Arevalo, John Davis, Michael Dejesus, Jawed Hira, Chee Hou Hon, Yudheer Manandhar, Jessica Monge, Chris Petta, Don Phelps III, Kenneth Smith, Jhon Tito Cabanillas, Kaibin Wu, Raymond Yan
MAT 2540: Discrete Mathematics II
Prof. Satyanand Singh
Abstract: An important study in discrete mathematics is undirected and directed graphs which simplify complex practical problems. By coding in an appropriate software one can better understand and solve many practical problems. We illustrate these concepts by studying and encoding trees; subtrees; spanning trees; prim’s algorithm and matrices using the Maple software.

Graph Theoretic Explorations Part II
Kamel Berrani, Omari Brown, Collin Clarke, Azddine Diouan, Johnny Feng, Kurt Justin Gangaram, Naveen Grero, Mark Haskins, Adam Humm, Yun Fei Jiang, Nadia Khettane, Weihua Kuang, Weichi Lee, Dalton Martillo, Aminul Miah, Ayoola Ogunwuyi, O’Dane Paulwell, Chethani Perera, Sadaf Ramzan, Kevin Robinson, Adilseit Seitgaziiev, Keith Smith, Mauricio Vargas, Mason Vega, Cassius Verneige, Andrew Wills, Yaoxin Zhang
MAT 2540: Discrete Mathematics II
Prof. Satyanand Singh
Abstract: An important study in discrete mathematics is undirected and directed graphs which simplify complex practical problems. By coding in an appropriate software one can better understand and solve many practical problems. We illustrate these concepts by studying and encoding trees; subtrees; spanning trees; prim’s algorithm and matrices using the Maple software. We extend the work done in Part I.
The Infinitude of Primes in Certain Arithmetic Progressions
Sin Fong Chiu, Yanira Garcia, Victor Lee, Justin Meyer, Fathima Mohamed Rafeek, Erin Small, Sonya Sultana, Mei Zhu
MAT 3021: Number Theory
Prof. Satyanand Singh

Abstract: In this study we consider Arithmetic Progressions (AP’s) of the form an+b; where a and b are relatively prime integers. A sweeping generalization of Dirichlet shows that AP’s with this property contain infinitely many primes. We will illustrate this process for certain special cases which has important applications in cryptography.
NSF LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION (LSAMP) IN STEM
Mr. Marvin Bennett
Program Coordinator

Numerical Analysis of Waste-to-Energy Combustion Chambers
Joshua Afrifa
Prof. Masato Nakamura

Radios or Sensors – Which is the Best for Semi-/Non-autonomous Traffic?
Amadou Bah
Prof. Zory Marantz

Enterprise Web Application on Amazon Web Services
Ibrahima Barry
Prof. Ossama Elhadary

Elucidating Black Coral
(Cnidaria: Anthozoa: Hexacorallia)
Species Diversity in the Flower Garden Banks National Marine Sanctuary (Gulf of Mexico)
Craig Dawes
Prof. Mercer Brugler

Aerial Aid Navigation System
Jean Delgado-Caceres
Prof. Xiaohai Li

Graph Theory and Brain Connectivity
Thierno Diallo
Prof. Urmia Ghosh-Dastidar

AirCasting/Air Monitor Device
Fatime Elfatimi
Prof. Andy Zhang

Data Security in Embedded Computing Devices and RFID
Johnson Esenowo
Prof. Xin-Zhou Wei

Technology Driven Experiential Arts in Public Space around Elevators
Kelly Mendez
Prof. Xiaohai Li

Automatic Migration of Legacy Java Software
Olivia Moore
Prof. Raffi Khatchadourian

Evaluation of Novel Nuclear Introns within the Deep-Sea Black Coral Stauropathes Arctica
(Cnidaria: Anthozoa: Hexacorallia: Antipatharia)
Lysna Paul
Prof. Mercer Brugler
Compare Cancer Mutations Stored in the Catalogue of Somatic Mutations in Cancer (COSMIC) and The Cancer Genome Atlas (TCGA) Databases

Taheefa Stephen
Prof. Evgenia Giannopoulou

Star Chromatic Index of a Complete Graph
Marieme Toure
Prof. Simon Smith

Comparative Analysis of Glycosylated Photosensitizers Interaction with Plasma Proteins
Andrew Wills
Prof. Diana Samaroo

NSF RESEARCH EXPERIENCES FOR UNDERGRADUATES IN SATELLITE AND GROUND-BASED REMOTE SENSING AT NOAA-CREST 2 (NSF REU Grant # AGS-1062934)

Profs. Reginald Blake and Janet Liou-Mark and Ms. Laura Yuen-Lau

A Proposed Remote Sensing Early Warning Dura Home Earthquake System
Frederic Anglade
Prof. Alexander Aptekar

Monitoring Land-Cover Changes in Lake Urmia Basin Using LandSat Imagery
Amarou Bah
Prof. Hamidreza Norouzi

Satellite Base Soil Moisture Product Validation Using Ground Observations
Christian Campo
Prof. Hamidreza Norouzi

Designing a Research Poster Presentation
Mr. Marvin Bennett
November 12, 2015
The Feasibility Study of Using Microwave Emission in Detecting Drought and Land-Cover/ Land-Use Change Studies
Yanna Chen
Prof. Hamidreza Norouzi

Tiffany Chong
Prof. Masato Nakamura

Using Satellite Imagery to Monitor Major Lakes; Case Study: Lake Hamun and Lake Eyre
Rezwon Islam
Prof. Hamidreza Norouzi

Retrieving Vegetation Reflectance at Beltsville Using Photosynthetically Active Radiation (PAR) Sensor and a Spectroradiometer Positioned at an Unmanned Aerial Systems (UAS)
Francois Mertil
Profs. Ricardo Saika, Siwei Li and Demetrius Venable

An Analytical Study Comparing the Outcomes and Successes of a National Science Foundation Research Experiences for Undergraduates (NSF REU) Program
Ricky Santana
Profs. Janet Liou-Mark and Reginald Blake

Usaama Van
Prof. Masato Nakamura

NSF GP-EXTRA: RECRUITING AND RETAINING NON-GEOSCIENCE MINORITY STEM MAJORS FOR THE GEOSCIENCE WORKFORCE (NSF IUSE GEO Grant #1540721)
Profs. Reginald Blake, Janet Liou-Mark, Hamidreza Norouzi, Viviana Vladutescu, Ms. Laura Yuen-Lau

Using Landsat Data to Detect Lake Manitoba Changes Over Time
Maen Caka
Prof. Hamidreza Norouzi
Comparison between Regular (Raw Material Extraction) and Urban Mining (Material Recovery) Methods
Andrew Greaves
Prof. Masato Nakamura

Monitoring the Changes of Dead Sea Area in Last 40 Years Using LandSat Observations
Charyssa Morgan
Prof. Hamidreza Norouzi

Geophysical Applications of LIDAR Systems
Kleber Perez
Prof. Viviana Vladutescu

Geophysical Applications of LIDAR Systems
Kennedy Samarakody
Prof. Viviana Vladutescu

NIH BRIDGES TO THE BACCALAUREATE PROGRAM
Associate Provost Pamela Brown,
Profs. Liana Tsenova, Nathan Astrof, Pa Her, Jean Hillstrom,
Janet Liou-Mark, Diana Samaroo, Armando Solis, Tatiana Voza,
Ms. Lori Younge
(Bridges Scholars are underlined.)

Understanding VEGF-D and Computationally Designing its Synthetic Mimic
Zelda Nelson, Christopher Mason, Andreas Mardt, Najma Bibi
Prof. Mai Zahran

Gender Differences in Vagal Tone Adaptation in an Expressive Writing Paradigm
Saber Ventura, Dana Glatzer, Daniel Rosales, Cherishe Cumma
Profs. Jean Hillstrom and Pa Her

Intersections of Identifying Features in Medical Practice: Measurement, Outcomes, and the Role of Feminist Identity
Kimberley-Ann Basdeo,
Alexandra Nobel
Prof. Amanda Almond
Recent Advances in Efficacious Photosensitizers in Photodynamic Therapy (PDT)
Li Lin
Profs. Alberto Martínez and Diana Samaroo

Heterologous Studies of Serotonin 2A Receptor
Malik Barrett
Prof. Jeremy Seto

Tailored Protocols for DNA Extraction of Antipatharians
Nicole BellaFlores-Mejia and Eni Sejdini
Prof. Mercer Brugler

Role of Oligodendrocytes and Astrocytes in Multiple Sclerosis
Ling Yang
Prof. Andleeb Zameer

The Role of Tetrahymena Thermophila Sirtuins in Oxidative Stress
Jules Julenane
Prof. Ralph Alcendor

The Role of Calpains in Tetrahymena Thermophila
Safaa Hassan
Prof. Ralph Alcendor

How can the Peer Leader engage women in Workshop to develop their skills in Statics?
Amanda Hayley Brew

How can a Peer Leader help students overcome self-oriented behaviors?
Sanya Brown

How can semiotic mediation support students’ learning in a Mathematics Workshop?
Sarah Conyers

How can the Peer Leader increase students’ deep learning in a Mathematics Workshop?
Joshua Grillasca

How can students use real problems to improve their knowledge in Statics?
Abubakarr Jalloh

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