THIRD ANNUAL
WINTER
CREATIVE ACTIVITIES & RESEARCH DAYS
December 1-2, 2021

RADFORD UNIVERSITY
Undergraduate Research and Scholarship
radford.edu/wintercard
Welcome: It is my pleasure to welcome you to the 3rd Winter Creative Arts & Research Days at Radford University. As we reach the end of another unique semester I could not be prouder of the Radford University research and creative inquiry community. All week, there will be displays of students presenting the new knowledge they created while working closely with faculty and other students to solve wicked problems we face in society and on our planet. Monday the Artis College of Science and Technology will take center stage, then Tuesday Psychology and Gender Studies will have the spotlight, before shifting to campus wide sessions all day Wednesday and Thursday. We know the experience students get in tackling ambiguous processes and solutions transforms them well beyond learning skills in their disciplines, Radford University researchers are twice as likely to have leadership roles on campus, spend more time volunteering and in service activities, and learn Career Readiness Competencies. And it is with excitement we can share that the Center for Career and Talent Development is joining us Thursday to help presenters learn how to articulate those career competencies to future employers and receive a professional headshot.

As much as research is transformative, the contributions the last two years from Dr. Maggie Pate has transformed OURS. I need to take a moment here and recognize her countless contributions, leadership abilities, and enjoyment everyone in the office has taken from working with her. We will miss you Maggie and know you’ll be successful on your path ahead!

-With Highlander Pride, Dr. Joe Wirgau, Director of the Office of Undergraduate Research & Scholarship

Winter CARD Coordinators in OURS

Joe Wirgau, Director
Maggie Pate, Associate Director
Keishaun Williams, Administrative Assistant
Abby Hardbower, Graduate Assistant
Yasmine Tyler, Graduate Assistant
Leah Ellis, Executive Student Assistant
Maia Grove, Executive Student Assistant
Skylar Roberson, Executive Student Assistant

The Following Individuals are Acknowledged for Their Contributions:

Jeff Aspelmeier, Chair, Department of Psychology
Jason Clayton, Director, Center for Career and Talent Development
Ann Elliot, Director, Center for Gender Studies
David Horton, Assistant to the Dean, Artis College of Science and Technology
Mary Beth Kegley, Graphic Design Manager, University Relations
Traci Nelson, Administrative Assistant, Faculty and Staff Development
Norma Riggins, Event Planning Manager, University Services
Josh Wimmer, Graphic Production Tech Printing Services
Makayla Woodford, Graduate Assistant, Department of Psychology
In Person Schedule at a Glance

**Monday November 29th**
Artis College of Science and Technology Poster Session 1
- Main Street Lobby Center for the Sciences
  - 3:00 pm – 5:00 pm

Art History Session 1
- Walker Hall 2nd Floor Hallway and Lobbies
  - 5:00 pm – 7:00 pm

**Tuesday November 30th**
Artis College of Science and Technology Poster Session 2
- Main Street Lobby Center for the Sciences
  - 11:00 am – 11:50 am

9th Annual Psychology and Gender Studies Research Symposium
- Oral Presentations: Heth 022
  - 3:30 pm – 5:30 pm
- Poster Presentations: Heth 014
  - 5:00 pm – 7:00 pm

**Wednesday December 1st**
Art History Session 2
- McConnell 270 & Zoom
  - 11:00 am – 11:50 am
Winter CARD Poster Session 1
- Kyle Hall 340
  - 12:00 pm – 12:50 pm
Winter CARD Poster Session 2
- Kyle Hall 340
  - 2:00 pm – 2:50 pm

**Thursday December 2nd**
Winter CARD Poster Session 3
- Kyle Hall 340
  - 9:30 am – 10:45 am
Art History Session 3
- Ross Gallery in McConnell Library
  - 9:30 am – 10:45 am
Winter CARD Poster Session 4
- Kyle Hall 340
  - 11:00 am – 12:15 pm
Winter CARD Poster Session 5
- Kyle Hall 340
  - 2:00 pm – 3:15 pm
Art History Session 4
- McConnell Library
  - 2:00 pm – 3:15 pm
Winter CARD Poster Session 6
- Kyle Hall 340
  - 3:30 pm – 4:45 pm
Lightning Research Competition
- Center for the Sciences M073
  - 6:30 pm – 7:30 pm

Virtual Schedule at a Glance

All virtual sessions held via Zoom  
Password to all Winter CARD Zoom links is: WinterCARD

**Wednesday December 1st**
Sociology Session 1
- Meeting ID 971 5948 6618
  - 10:00 am – 10:50 am
Biology Session 1
- Meeting ID 917 7483 9753
  - 11:00 am – 11:50 am
School of Communication Session 1
- Meeting ID 983 1904 6499
  - 12:00 pm – 12:50 pm
School of Communication Session 2
- Meeting ID 983 1904 6499
  - 1:00 pm – 1:50 pm
School of Communication Session 3
- Meeting ID 983 1904 6499
  - 2:00 pm – 2:50 pm
Sociology Session 2
- Meeting ID 971 5948 6618
  - 4:00 pm – 4:50 pm

**Thursday December 2nd**
Multidisciplinary Session 1
- Meeting ID 921 0916 1490
  - 9:30 am – 10:45 am
Citizen Leader Session
- Meeting ID 987 1044 4432
  - 4:00 pm – 4:50 pm

**Friday December 3rd**
Sociology Session 3
- Meeting ID 971 5948 6618
  - 10:00 am – 10:50 am
Sociology Session 4
- Meeting ID 971 5948 6618
  - 4:00 pm – 4:50 pm
Winter CARD Events

Equipping The Professional You

The Center for Career and Talent Development is committed to helping you discover your uniqueness and gain valuable experience to thrive in your professional and personal life.

On December 2nd from 12 - 2P.M. in 340 Kyle Hall, get your professional photo taken by the Office of Alumni Relations and meet some of the Career and Talent Development team. You can learn about how you can market your undergraduate research experience as an in-demand skill set with today’s employers, free professional clothing available to you through our Career Closet, and about a multitude of other helpful career resources.

Find us at:
Office - 331 Russell Hall
Phone - 540-831-5373
Email – csc@Radford.edu
Handshake - @radfordcareer

9th Annual Psychology & Gender Research Symposium
Tuesday, November 29th from 3:30 – 7:00 pm

Psychology & Gender Research Symposium
Department of Psychology
9th Annual Fall 2021
Co-sponsors
Office of Undergraduate Research and Scholarship
The Center for Gender Studies

Tuesday
November 30th
Heth 022 & 014
3:30 - 7:00 pm
Art History Session 1: Contemporary Women in Art  
Monday November 29th 5:00-7:00 pm in Walker Hall 2nd Floor Hallway and Lobbies

Grace Atallah  Zach Blevins-Goad  Jacy Brown  Jennifer Burns  
Molly Dunford  Sofia Growchowski  Mina Hatami  Sydne Moseley  
Tonita Parks  Erica Sallee  Lauren Santa  Matthew Stoecker  
Courtney Stultz  Dan Tyler  Luc White  

Faculty Mentor(s): Roann Barris

Students in this class, while trying to answer the question of whether or how feminism or gender influenced art, chose an artist they admired and one work made by that artist for a close study. Part of their study included making a reproduction of the masterwork they chose in order to understand the techniques used by the artist. Some of the students may also include a work made by themselves in the style of the artist they were studying.

Art History Session 2: Social Justice Issues and the Empathetic Museum  
Wednesday December 1st 11:00-11:50 am in McConnell 270 and Zoom  
Zoom Meeting ID: 992 5976 9998  Password: WinterCARD

Mbaida Nying  Josh Barber  Jacy Brown  Heather Dawson  
Dan Tyler  Maichal Valentine  

Faculty Mentor(s): Roann Barris

This presentation will be a roundtable discussion. Each student has been analyzing a particular museum of interest with a goal of identifying how that museum has responded to contemporary social justice issues and what factors affected that response. In addition to analyzing the “maturity” of the museum when it comes to social empathy, students will present their suggestions for improving the museum they studied in the area of responsiveness to issues of social justice. Find out about the empathy scale, what museums are doing today (besides displaying their collections) and how museums can progress from a lack of empathy to a high level of empathy.
Art History Session 3: Breakfast with Graphic Design at the Movies
Thursday December 2nd 9:30-10:45 am in Andrew Ross Student Gallery McConnell Library

Emily Woods  Ashley Dickerson  Gina Godwin  Oliver Huffman  Kenny Nguyen
Desi Parks  Lauren Santa  Katlyn Walters  Abel Yacob  Westin Yates
Faculty Mentor(s): Roann Barris

In this year’s project, the students in the history of graphic design class were asked to choose a movie poster they admired but at the same time thought could be better. The works you will see in this year’s exhibition on display in the Andrew Ross Student Art Gallery in McConnell Library will demonstrate the students’ recognition of strong graphic design work and their ability to make it better. If you come for the opening reception, the students will be there to explain their design decisions.

Art History Session 4: Native American Arts
Thursday December 2nd 2:00-3:15 pm in McConnell Library Lobby

Maichal Valentine  Makayla Brooks  Jennifer Burns  John Campbell
Heather Dawson  James Spaulding  Luc White
Faculty Mentor(s): Roann Barris

Everyone in this class was amazed by the range of media, techniques, and abilities of indigenous American artists who rarely get studied and whose names and works are rarely seen. We hope to correct that with this exhibition: everyone has chosen a particular type of native artwork to study. Their works for this show will not be copies but they will be made using the same techniques and materials used by the original indigenous artists. Some of the students have been weaving with porcupine quills! Whether quills or water colors, we hope to expand your knowledge of indigenous styles and art works.
Artis College of Science and Technology Poster Session 1
Monday November 29th, 3:00 – 5:00 pm in Main Street Lobby Center for the Sciences

Updates from Selu Observatory
Jonathon Halferty  Sarah Kellogg  Joe Peton  Jacob Sneider  Colton Whittaker
Faculty Mentor(s): Sandra Liss

Human Influenced Landscapes at Selu, Virginia
Josh Barber  Jacob Ritter
Faculty Mentor(s): David Anderson

An Infrared Sensor for Detecting Air Particulates
Anith Muthalaly
Faculty Mentor(s): Rhett Herman

A Multi-Wavelength Light Sensor for Detecting Air Particulates
Sam Williams
Faculty Mentor(s): Rhett Herman

A Red Laser Based Sensor for Detecting Air Particulates and Atmospheric Light Extinction
Sami Reitz
Faculty Mentor(s): Rhett Herman

An Ultrasonic Wind Speed Sensor Hack
Jenna Petty
Faculty Mentor(s): Rhett Herman

Artis College of Science and Technology Poster Session 2
Tuesday November 30th, 11:00 – 11:50 pm in Main Street Lobby Center for the Sciences

Me-oh, My-oh: The Cajun Predicament
Charles Branner
Faculty Mentor(s): Megan Elder-Taylor

A battle for belonging: The Link Between Language and Ethnicity
Wesley Jarvis
Faculty Mentor(s): Megan Elder-Taylor

An Overview of the Phonology and Syntax of Sanskrit
John McKenney
Faculty Mentor(s): Megan Elder-Taylor

America's Buried Sociolect: The Patterns, Uses, and Social Context of the Trans-Atlantic Dialect
Andra Tomlin
Faculty Mentor(s): Megan Elder-Taylor

Traditional Chicago Dialect
Jalyn Reed
Faculty Mentor(s): Megan Elder-Taylor
The Effects of Anthropogenic Impacts on Soil Quality
Sierra Dean  Jahsmine Fowler  Christina Beane
Gabrielle Fields  Helena Willson
Faculty Mentor(s): Jamie Lau

The Synthesis of Gallium Containing Organometallic Compounds
Mary Elizabeth Demmin
Faculty Mentor(s): George Harakas

Competitive High School Athletes and the Pre-Participation Physical Exam (PPE): Do State High School Associations Need to Adopt a Higher Standard of Care?
Brie Flanagan
Faculty Mentor(s): Pamela Frasier  Angela Mickle

Comparing Neck Mobility and Muscle Activation
Evan Somervell
Faculty Mentor(s): David Sallee

Getting To The Bottom Of It: How Pesticides Affect Groundwater in the Ecosystem
Genesis Carter  Jennah Dimaggio  Ashton Ennis  Makayla Newman
Faculty Mentor(s): Joseph Wirgau

Impact of Gender Identity on Developing Adolescence
Lauren Craddock  Victoria Dean  Gaberiel Tieskotter
Faculty Mentor(s): Joseph Wirgau

College Freshmen’s Strive for Success: How Mental Health is Affected by First-Year Nutrition and Sleep Patterns
Leah Ellis  Lexie Cobb  Dani Haines  Chloe Dowell
Faculty Mentor(s): Joseph Wirgau

Artificial Intelligence Sustainability For The Future
Ryan Coleman  Jaevan Boone  James Wallace  Christopher Oliver
Faculty Mentor(s): Joseph Wirgau

Nature Rx: Using Outdoor Recreation to Improve Student Mental Health
Abbi Green  Dom Del Grosso  Hansy Velazquez
Faculty Mentor(s): Joseph Wirgau
Winter CARD Poster Session 1  
Wednesday December 1st, 12:00 – 12:50 pm in Kyle Hall 340

Climate and Ecological Disturbance Analysis of White Oak Species at Selu Conservancy Radford, VA
Gabriella Richards  Madigan Bright  Jadelyn Smith
Faculty Mentor(s): Stockton Maxwell

Dendrochronology Climate Relations
Rand Bohnert  Avery Blood  Ben Ramsey
Faculty Mentor(s): Stockton Maxwell

Dendrochronology of White Oak Growing at Selu Conservancy
Sheldon Dobbins  Patrick Shrader  Jonathan Antin
Faculty Mentor(s): Stockton Maxwell

Climate Response of White Oak at Selu Conservancy
Amber Stovall  Luc White  Breonna Cox
Faculty Mentor(s): Stockton Maxwell

Disturbance and Climate Response Analysis of White Oak Tree Growth at Selu Conservancy
Nick Francis  Keasia Clark  Savannah Trail
Faculty Mentor(s): Stockton Maxwell

Recent Tragic Events Costume Design
Harvey Perkins
Faculty Mentor(s): Jennie Ruhland

The Impacts Of Landing While Using An Ankle Brace
Austin Witcher
Faculty Mentor(s): David Sallee

phylogatR: Phylogeographic Data Aggregation and Repurposing
Stephanie Crouch
Faculty Mentor(s): Tara Pelletier

No Wi-Fly List: An Introduction to Drone Security
Sam Williams  Martin Noftsinger
Faculty Mentor(s): Hwajung Lee
Winter CARD Poster Session 2
Wednesday December 1st, 2:00 – 2:50 pm in Kyle Hall 340

Evaluation of Reminiscence Therapy as an Effective Non-pharmacological Evidence-based Intervention for Alzheimer’s Disease
Haley Conley
Faculty Mentor(s): Darlene Hoffert

Hide & Seek: The Search for the Elusive Praying Mantis
Nii Abraham Nicholas Webster Ashley Austin Nathan Null
Faculty Mentor(s): Jamie Lau

Comparative Collection Methodology for the Eastern Hercules Beetle in Radford, Virginia
Mark Passeretti Lyla Chittum Elise Simmons Haley Howerin
Faculty Mentor(s): Jamie Lau

Mapping The Distribution Of Cheumatopsyche Morphotype D In Three Local Streams
Maya Banks Gabriella Richards Hunter Villanueva Katarina McCann
Faculty Mentor(s): Jamie Lau

The Search for the Handsome Fungus Beetle
William Cecil Melissa Ifidzhen Morgan Mullens Britani Albert
Faculty Mentor(s): Jamie Lau

The Search for Red-Legged Grasshopper (Melanoplus femurrubrum) on Radford University’s Campus
Sierra Felty Mandi Gills Trey Harris Chris Wozniak
Faculty Mentor(s): Jamie Lau

Distribution of Small Milkweed Bugs (Lygaeus kalmii) In Radford, VA
Hannah Stuart Breonna Cox Kayla Wines Alayna Carter
Faculty Mentor(s): Jamie Lau

Situating Assemblages of Grasshoppers in Sustainability
Mandi Gills
Faculty Mentor(s): Jamie Lau Stockton Maxwell

Synthesis and Characterization of Xenophilic Transition Metal Clusters
Jake Morris
Faculty Mentor(s): George Harakas

Engineering Safety And Stability Analyses Of Rock Cuts For Federal Infrastructure Improvements, Rt 48 / Corridor H, West Virginia
Matthew White Jasmine Rollins Kendra Bolen
Faculty Mentor(s): Chester Watts Elizabeth McClellan James Young

Aerial 3D Modeling & Monitoring of Campus Construction Sites at Radford University Using Unmanned Aircraft
Sarah Jackson Matthew White Jasmine Rollins
Faculty Mentor(s): Chester Watts Elizabeth McClellan James Young
Winter CARD Poster Session 3
Thursday December 2nd, 9:30 – 10:45 am in Kyle Hall 340

Testing The Intermediate Disturbance Hypothesis at Selu Conservancy Using an Insect Assemblage
Gabriel Tieskotter
Anthony Esquivel-Tellez
Faculty Mentor(s): Jamie Lau
Salvador Simpson
Arvid Rutledge
Kayla Scott

Tortell-Gene-I
Ryan Dippel
Faculty Mentor(s): Tara Pelletier
Andrew Daniels
Amanda Raimer

The Toxicity In Our Tortellini
Damaris Forkey
Faculty Mentor(s): Tara Pelletier
Melissa Ifidzhen
Maya Anderson
Amanda Raimer

Baked Tortellini & Genes Icing
Chris koszeghy
Faculty Mentor(s): Tara Pelletier
Nii Abraham
Amanda Raimer

Tortellini Obsessed
Justin McLaughlin
Faculty Mentor(s): Tara Pelletier
Karl Katlaps
Amanda Raimer

Tortellini Gene Survey: the Virus, Not the Pasta
Drew Reavis
Faculty Mentor(s): Tara Pelletier
Emily Cardoso
Amanda Raimer

Tortellini, Pasta or Genes?
Jacey Estep
Faculty Mentor(s): Tara Pelletier
Derrick Sutton
Amanda Raimer

Using DNA Barcoding to Identify Museum Specimens
Brianna Bray
Faculty Mentor(s): Robert Sheehy
Brittany Mason
Courtney Whitt
Zach Christman

Species Identification using DNA Barcoding
Brian Currin
Faculty Mentor(s): Robert Sheehy
Jaris Hernandez
Brittany Rakes
Brielle Smith
Corey Whited

Identification of Museum Specimens Using DNA Barcoding
Mel Lively
Faculty Mentor(s): Robert Sheehy
Jenna Blanchette
Keyvanta Watson
Alex Wheatley
Winter CARD Poster Session 3
Thursday December 2nd, 9:30 – 10:45 am in Kyle Hall 340

**Confirmation of Species Identification Using DNA Barcoding**
Sondrea Perry    Megan Vineyard    Ashanti White    Triston Perry
Faculty Mentor(s): Robert Sheehy

**DNA Isolating and Sequencing of Different Organisms**
Hailee Shifflett    Laken Robinson    Elena Hall    Destiny Thaler    Conan Busic
Faculty Mentor(s): Robert Sheehy

**ESPN Advertising Strategy**
Ramiro Banuelos-Haro
Faculty Mentor(s): Jane Machin

**Dove Advertising Strategy**
Kayla Brown
Faculty Mentor(s): Jane Machin

**Titleist Advertising Strategy**
Jarrod Burnette
Faculty Mentor(s): Jane Machin

**TaylorMade Advertising Strategy**
Matthew Davidson
Faculty Mentor(s): Jane Machin

**Fenty Beauty Advertising Strategy**
Shawnda Dennis
Faculty Mentor(s): Jane Machin

**Disney Parks Advertising Strategy**
Emily Duralia
Faculty Mentor(s): Jane Machin

**Yonex Advertising Strategy**
Malin Falk
Faculty Mentor(s): Jane Machin

**Budweiser Advertising Strategy**
Ryan Finn
Faculty Mentor(s): Jane Machin

**7-11 Advertising Strategy**
Liam Fitzgerald
Faculty Mentor(s): Jane Machin

**Natural Light Advertising Strategy**
Christian Grzejka
Faculty Mentor(s): Jane Machin

**Air Jordan Advertising Strategy**
Terran Hubbard
Faculty Mentor(s): Jane Machin

**Nike Advertising Strategy**
Geoffrey Hudson
Faculty Mentor(s): Jane Machin

**State Farm Advertising Strategy**
Lamar Jones
Faculty Mentor(s): Jane Machin

**Longchamp Advertising Strategy**
Chloe Kopoin
Faculty Mentor(s): Jane Machin

**Old Spice Advertising Strategy**
Hunter Lee
Faculty Mentor(s): Jane Machin

**Jack Links Advertising Strategy**
Austin Nicholas
Faculty Mentor(s): Jane Machin

**Peanut M&Ms Advertising Strategy**
Caton Owens
Faculty Mentor(s): Jane Machin

**Michelin Tires Advertising Strategy**
Mathilde Patillot
Faculty Mentor(s): Jane Machin
Winter CARD Poster Session 3  
Thursday December 2nd, 9:30 – 10:45 am in Kyle Hall 340

**Barbie Advertising Strategy**  
Macie Rice  
Faculty Mentor(s): Jane Machin

**Coke Zero Advertising Strategy**  
Carla Risser  
Faculty Mentor(s): Jane Machin

**Oreo Advertising Strategy**  
Dylan Smith  
Faculty Mentor(s): Jane Machin

**Free People Advertising Strategy**  
Cameron Sowers  
Faculty Mentor(s): Jane Machin

**Converse Advertising Strategy**  
Erica Tickle  
Faculty Mentor(s): Jane Machin

**Shein Advertising Strategy**  
Eleni Tufa  
Faculty Mentor(s): Jane Machin

**Spotify Advertising Strategy**  
Natalie Welsh  
Faculty Mentor(s): Jane Machin

**Sabra Advertising Strategy**  
Sara Werthmann  
Faculty Mentor(s): Jane Machin

**Staples Advertising Strategy**  
Logan Woodle  
Faculty Mentor(s): Jane Machin

**CSI Radford: Conducting a Criminal Investigation**  
Corey Jones  
Devan Rowe  
Gladys Addo  
Hailey Kirk  
Jack Rice  
James Denfeld  
John Margraf  
Matthew Powell  
Noah Pye  
Rachel Silverman  
Tori Pate  
Faculty Mentor(s): Eric Snow

**Following the Evidence**  
Audae Dudley  
Cailin Johnson  
Caroline Thompson  
Emilee Hasenbeck  
Finley Miers  
Jaida Rose  
Kiara Harrison  
Kiersten Dodson  
Michelle Gonzalez  
Mohamed Elroumy  
Myka Reed  
Preston Martin  
Faculty Mentor(s): Eric Snow
Winter CARD Poster Session 4
Thursday December 2nd, 11:00 – 12:15 pm in Kyle Hall 340

The Color Behind Bars: Racial Analysis of Federal Sentencing
   Myka Reed  Nicole Odvina  Ethan Reynolds  Noah Scherer
Faculty Mentor(s): Maggie Pate

How Does the Use of Illicit Drugs Affect Crime in Rural and Urban Areas?
   Desirae Booth  Will Wilkinson  Madi Cummins  Michael Weir
Faculty Mentor(s): Maggie Pate

Every Serial Killer Has a Past: The Impact of Trauma and Abuse
   Cade Fisher  Tori Roggenbuch  Debbie Scott
Faculty Mentor(s): Maggie Pate

Disparities in Opinions on Gun Control
   Ethan Humphrey  Nathan Howell
Faculty Mentor(s): Maggie Pate

Effectiveness of Juvenile Rehabilitation
   Rachel Silverman  Vladimir Perez  Shalease Snead  Beekengsa Ngu
Faculty Mentor(s): Maggie Pate

The Impacts of Age, Race, and Gender on Criminality
   Liam Kerley  Matthew Nasatka  Samantha Huffman  Tatiyanna Harper
Faculty Mentor(s): Maggie Pate

The Effect Of Rehabilitation Programs On Recidivism In U.S Prisons.
   Brandon Saunders  Nick Townsend  Carter Noell  Karson Hawkins
Faculty Mentor(s): Maggie Pate

Mass Shootings and Locations
   Kyle Cardenas
Faculty Mentor(s): Maggie Pate

Dangerous Neighborhoods
   Alexandria Herrera
Faculty Mentor(s): Maggie Pate

What Was Left in Grandma’s Will
   Ian O’Donoghue
Faculty Mentor(s): Rebecca Dias

Bright Life
   Marlet Castillo
Faculty Mentor(s): Rebecca Dias

Searching for Answers: Completing a Mock Investigation
   Anderson Deleon Vasquez  Bryce Owens  Caleb Randall  Erika Meadows
   Evan Masson  Jessica Geppert  Kate May  Matt Domin
   Meg Stephens  Morgan Blank  Noah Dempsey  Spencer Hyland
   Tanner Oakley
Faculty Mentor(s): Eric Snow
Winter CARD Poster Session 4  
Thursday December 2nd, 11:00 – 12:15 pm in Kyle Hall 340

It's Not Like TV: Criminal Investigations
Aurora Carle  Ayden Kyle  Christopher Deshazo  Cole Lambert  
Daniel Graves  Darcy Caba  Emily Westhusen  Jacob Cornelius  
Pasha Findley  Reed Boschen  Taylor Jamison  Vanessa Garcia  
Faculty Mentor(s): Eric Snow

Scientific Literature Search: Health
Ayeyi Annan  Arvid Rutledge  Josiah Gooding  
Faculty Mentor(s): Tara Pelletier

Gene Annotation of the Insulin Signaling Pathway in Drosophila biarmipes
Maya Banks  
Faculty Mentor(s): Tara Pelletier

Police Misconduct and The Likelihood of Fellow Officers to Report Misconduct
Valente Perez III  
Faculty Mentor(s): Maggie Pate

Tayler Hover  
Faculty Mentor(s): Maggie Pate

Evaluation of Police Officer Demographics Regarding The Use of Physical Force
Trey Bussey  
Faculty Mentor(s): Maggie Pate

The Impact of Education on the Likelihood to Report Elder Abuse
Kathleen Stiltner  
Faculty Mentor(s): Maggie Pate

The Effect of Household Instability on the Onset of Criminal Offending
Megan Graybill  
Faculty Mentor(s): Maggie Pate

The Effects of Community Policing on Police Officers
Allen Minnick  
Faculty Mentor(s): Maggie Pate

Ask John: The Effect of Johns' Aggression Levels and Opinion of Woman on their Want for Prostitution to be Legalized or Decriminalized
Jessica Wileman  
Faculty Mentor(s): Maggie Pate
Winter CARD Poster Session 5
Thursday December 2nd, 2:00 – 3:15 pm in Kyle Hall 340

Using Design Thinking to Increase Enrollment in AMHI
Libby Bowman Destynie Davis Ally Flege Tyler Hull Linley Tirrell
Faculty Mentor(s): Jane Machin

Using Design Thinking to Improve CPS Effectiveness
Jackson Hunter Jake Miller
Faculty Mentor(s): Jane Machin

Using Design Thinking to Solve Climate Change
Kamajh Crockett Kyle Galloway Nicholas Ortiz Mike Reda Carter Tyler
Jordan Watkins Davo Young
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Consumption Waste
Christian Allen Carter Campbell Kendall Dollarton Joe Kuppich
Faculty Mentor(s): Jane Machin

Using Design Thinking to Help Eating Disorders
Rachel Garrison Addison Howard Kimani Smith
Faculty Mentor(s): Jane Machin

Using Design Thinking to Student Retention
Roger Basham Evan Blakey Devan Templeton Kyle Williams
Faculty Mentor(s): Jane Machin

Using Design Thinking to Improve Parenting Effectiveness
Niki Burkhart Sammie Judis Kayla Mosby Te’ana Schmitt
Faculty Mentor(s): Jane Machin

Using Design Thinking to Improve Foster Care System
Elizabeth Fontana Scarlet Sage
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Gender and Race Equality
Najah Goodson Dee Lewis
Faculty Mentor(s): Jane Machin

Using Design Thinking to Design A Greener Environment
William Atkinson Connor Houston Sarah Jarrell Alejandro Ruvalcaba
Faculty Mentor(s): Jane Machin

Using Design Thinking to Change Perceptions about Marijuana
Anthony Dildy Jasmine Drummond Xavier Zay Prescott Caleb Salmon
Faculty Mentor(s): Jane Machin
Winter CARD Poster Session 5  
Thursday December 2nd, 2:00 – 3:15 pm in Kyle Hall 340

Using Design Thinking to Improve Mental and Physical Health in Sports  
Thomas Allen  Joey Barron  Patrick Burns  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Improve Mental Health in College Students  
Dylan Deavers  Nate Hayes  Emily Hirshorn  Nathan Loving  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Improve Mental Health in College Students  
Hallie Garrison  Jillian Maas  Karis Malik  Kylie Thomas  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Innovate with Music for Mental Health  
Daniel Gahafer  Meghan Kozak  Thomas York  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Pollution  
Travis Battle  Sydney Braham  Brandon Buchanan  Ben Vess  Will Jones  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Pollution  
Carter Branch  Clay Guilliams  Tyler Haynes  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Racial Inequalities  
Kayla Brown  Amber Ross  Gianni Tingle  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce River Pollution  
Madison Durham  Kat Owens  Astrid Uriostegui  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Develop Healthier Drinking Habits  
Brooke Dedekind  Colin Farrell  Abby Hawkins  Kaysee Mennell  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Develop Healthier Drinking Habits  
Coleman Morgan  Haylee Porras  
Faculty Mentor(s): Jane Machin

Using Design Thinking to Develop Healthier Drinking Habits  
Reid Londeree  Tyler Tinder  
Faculty Mentor(s): Jane Machin
Using Design Thinking to Reduce Social Media Toxicity
Lizzie Chiesa  Bryson Dansberry  Tytianna Roberts
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Violence on Campus
George Bahi  Courdae Gravely  Max Henry  Emily Pavey
Faculty Mentor(s): Jane Machin

Using Design Thinking to Develop Healthier Drinking Habits
George Rucker  Dylan Soles
Faculty Mentor(s): Jane Machin

Using Design Thinking to Develop Healthier Drinking Habits
Alex Alderton  Spencer Brinkley  Jack Burch
Ray Smith
Mason Childress
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Student Homelessness
Isaiah Joyner  Connor Knights
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Social Media Toxicity
Rachel Doyle  Arie Goard  Rachel Musser  Eleni Tufa
Faculty Mentor(s): Jane Machin

Using Design Thinking to Improve Mental Health in College Students
Emrick Emrick  Gracie Morse  Reese Myers  Justin Snyder
Faculty Mentor(s): Jane Machin

Using Design Thinking to Develop Healthier Drinking Habits
Nathaniel Feagans  Ayden Franco  Morgan Kleene
Nick Pearson  George Rebh
Faculty Mentor(s): Jane Machin

Using Design Thinking to Reduce Violence on Campus
Lydia Burke  Hunter Lee  Vaniece Smith
Faculty Mentor(s): Jane Machin
Winter CARD Poster Session 6
Thursday December 2nd, 3:30 – 4:45 pm in Kyle Hall 340

Comparing Sugar Maple (Acer saccharum) Leaf and Stem Biomass Among Three Locations, Radford City
Ray Pryor Ayeyi Annan
Faculty Mentor(s): Jamie Lau

Metabarcoding for Assessment of Biodiversity Before a Severe Human Impact
Steven Busser Tara Pelletier
Faculty Mentor(s): Tara Pelletier

Identifying Plethodon wehrlei Species Using dCAPS Technique
Cassandra Hash
Faculty Mentor(s): Robert Sheehy

Conservation of an At-Risk Medicinal Forest Herb: Sustainable Harvest and Propagation of Goldenseal in Appalachian Forests
Elise Simmons Mark Passeretti Luc White Patrick McKenney
Faculty Mentor(s): Christine Small

Effects of the Invasive Emerald Ash Borer on Forest Health in Southwest Virginia
Elise Simmons Mark Passeretti Luc White Patrick McKenney
Faculty Mentor(s): Christine Small

Is the Neutral Zone Really Neutral? Gang Activity in Schools
Kevin Bruce
Faculty Mentor(s): Eric Snow

Family Violence Victims
Alexis Ganser
Faculty Mentor(s): Eric Snow

Incarceration and Race
Nevada Ghiringhelli
Faculty Mentor(s): Eric Snow

State Policy on Abortion
Celeste Herring
Faculty Mentor(s): Eric Snow

Police CIT and Medical Training
Connor Knights
Faculty Mentor(s): Eric Snow

History and Rise of Motor Vehicle Theft
Cole Lambert
Faculty Mentor(s): Eric Snow

Medical Care in Prison During COVID-19
Debbie Scott
Faculty Mentor(s): Eric Snow
Winter CARD Poster Session 6
Thursday December 2nd, 3:30 – 4:45 pm in Kyle Hall 340

Illegal Search and Seizures
Shantiyanna Simmons
Faculty Mentor(s): Eric Snow

Prosecutorial Discretion: The Abuse of Power
Noah Simmons
Faculty Mentor(s): Eric Snow

Mentally Ill within the Prison System
Michael Wolfe
Faculty Mentor(s): Eric Snow

Implementing A New K9 Policy For Virginia Police
Rachel Bell
Faculty Mentor(s): Eric Snow

Drug Courts
Ashley Campos
Faculty Mentor(s): Eric Snow

Disaster Response: E.R.I.S. (Emergency Response Information System)
Angie Giuffre
Faculty Mentor(s): Eric Snow

Protection of Correctional Officers
Arizona Sullivan
Faculty Mentor(s): Eric Snow

Mental Health in the Criminal Justice System
Jordan Dameron
Faculty Mentor(s): Eric Snow

SWAT Policy on Training and Field Procedure
Rex Diaz
Faculty Mentor(s): Eric Snow

Human Trafficking
Pavel Findley
Faculty Mentor(s): Eric Snow

Scientific Literature Search: Organisms
Kayla Scott, Gabriel Tieskotter, Maddie Martin
Faculty Mentor(s): Tara Pelletier

Creative Research: The Journey of a Choreographic Piece
Mailey Paupore
Faculty Mentor(s): James Robey

Research and Inquiry in Movement: A Choreographic Study
Sarah Kadel
Faculty Mentor(s): James Robey
Winter CARD Lightning Research Competition
Thursday December 2nd, 6:30 – 7:30 pm in Center for the Sciences M073

What Is Code Switching and Why Do People Do It?
  Michael Alford
  Faculty Mentor(s): Megan Elder-Taylor

Bee Taxonomy Utilizing Family and Genus Level Keys
  Lily Bishop
  Faculty Mentor(s): Chett Bahatta

Sex and Gender Estimation in Forensic Anthropology and the Identification of Transgender Individuals
  Dakota Taylor
  Faculty Mentor(s): Donna Boyd

A Mixed Methods Multidisciplinary Examination of Diversity in Education
  Montasia Braxton
  Faculty Mentor(s): Twange Kasoma

Antibiotics: Can We Make Them Less Of A Threat?
  Benjamin Dearborn
  Faculty Mentor(s): Sarah Kennedy

Conservation of an At-Risk Medicinal Forest Herb: Sustainable Harvest and Propagation of Goldenseal in Appalachian Forests
  Luc White
  Faculty Mentor(s): Christine Small

Dendrochronology in Southwest Virginia
  Nicholas Francis
  Faculty Mentor(s): Stockton Maxwell
**Virtual Sociology Session 1**  
**Wednesday December 1st, 10:00 – 10:50 am**  
**Zoom Meeting ID:** 971 5948 6618  
**Password:** WinterCARD

*Taste the Rainbow: A Look into the Not So Pretty Parts of the LGBTQ+ Community*  
Sheridan Dean  Ruth Payne  
Faculty Mentor(s): Aysha Bodenhamer

*Marijuana And Mass Incarceration*  
Ursula Turner  Oak Bradshaw  Alexis Johnson  
Faculty Mentor(s): Aysha Bodenhamer

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**Virtual Biology Session 1**  
**Wednesday December 1st, 11:00 – 11:50 am**  
**Zoom Meeting ID:** 917 7483 9753  
**Password:** WinterCARD

*Public Perceptions on Bees and Their Conservation*  
Savannah Allison  Jordan Bowden  Madeline Guerra  Peyton Rader  
Sydney Vinson  Glenda Zavala  
Faculty Mentor(s): Chet Bhatta

*Diversity of Pollen Yields Between Native Apis Cerana and Exotic Apis Mellifera*  
Troy Stallard  Sofia Stallard  Trerese Roberts  Brandy Thacker  
Lauren French  
Faculty Mentor(s): Chet Bhatta

*Fundamentals and Matrilineage of Honeybees From Nepal*  
Christopher Blankenship  James Stevens  Kaung Lin  Hunter Rogers  
Graham Grasty  
Faculty Mentor(s): Chet Bhatta

*Exploring Bee Taxonomy Utilizing Family and Genus Level Keys*  
Lily Bishop  Lauren Croiser  Serenity Coggins  Aminata Yarmah  
Faculty Mentor(s): Chet Bhatta
Virtual School of Communication Session 1
Wednesday December 1st, 12:00 – 12:50 pm
Zoom Meeting ID: 983 1904 6499 Password: WinterCARD

Representation of Asian Americans and Pacific Islanders in Media: A Content Analysis
Noelle Agcaoili
Faculty Mentor(s): Leigh Anne Kelley John Brummette

How Gender Roles are Displayed in the TV Show "New Girl"
Emily Brandt
Faculty Mentor(s): Leigh Anne Kelley

Harassment in the Workplace: Reality vs. Media Representation
Isaac Buruca
Faculty Mentor(s): Leigh Anne Kelley

ESPN College Football Broadcasts: A Content Analysis
Mason Collins
Faculty Mentor(s): Leigh Anne Kelley

Is Rap Music Actually Violent?
Najee Simons
Faculty Mentor(s): Leigh Anne Kelley

Content Analysis of Video Game Violence and Its Increase in Popularity of All Ages
Bradley Grainer
Faculty Mentor(s): Leigh Anne Kelley

Virtual School of Communication Session 2
Wednesday December 1st, 1:00 – 1:50 pm
Zoom Meeting ID: 983 1904 6499 Password: WinterCARD

Violence in "Peaky Blinders": A Content Analysis
James Arnold
Faculty Mentor(s): Leigh Anne Kelley

Money Mentioned in ‘Squid Games’: A Content Analysis
Shawn Banks
Faculty Mentor(s): Leigh Anne Kelley

Leadership Styles in "Band Of Brothers": A Content Analysis
Jesse Kimrey
Faculty Mentor(s): Leigh Anne Kelley

Visual Content Analysis Of Bestselling Hip-Hop Album Covers
Cameron Mclaine
Faculty Mentor(s): Leigh Anne Kelley

Violence In David Dobrik Videos: A Content Analysis
Dabney Ward
Faculty Mentor(s): Leigh Anne Kelley
Virtual School of Communication Session 3  
Wednesday December 1st, 2:00 – 2:50 pm  
Zoom Meeting ID: 983 1904 6499  
Password: WinterCARD

Sexism In The Rick And Morty Television Series: A Content Analysis  
Montana Blum  
Faculty Mentor(s): Leigh Anne Kelley

TikTok's on the Clock: An Analysis of TikTok's Impact on the Music Industry  
Christian Millsaps  
Faculty Mentor(s): Leigh Anne Kelley

The Rise and Fall of Justin Bieber: A Content Analysis  
Carolyn Palmer  
Faculty Mentor(s): Leigh Anne Kelley

Lyrical and Stylistic Crossover: An Empirical Comparison of Rap and Hip Hop Music  
Alana Peyton  
Faculty Mentor(s): John Brummette Leigh Anne Kelley

News Coverage on ABC World News  
Maevyn Jones  
Faculty Mentor(s): Leigh Anne Kelley

Swear Words in Animated Sitcoms  
Lydia Michaud  
Faculty Mentor(s): Leigh Anne Kelley

Virtual Sociology Session 2  
Wednesday December 1st, 4:00 – 4:50 pm  
Zoom Meeting ID: 971 5948 6618  
Password: WinterCARD

Black Lives Matter  
Michaela Dalton  
Kelcie Lemons  
Campbell Howard  
Takiyah Campbell  
Faculty Mentor(s): Aysha Bodenhamer

How Does Raising the Minimum Wage Affect Employment?  
Noah Kennedy  
Alejo Cobos  
Mya Thomas-Ordonez  
Cael Laylock  
Faculty Mentor(s): Aysha Bodenhamer

The Misfortune of United States Healthcare  
Molly O'Brien  
Naomi Banya  
Jamia Pegues  
Kaitlyn Morris  
Faculty Mentor(s): Aysha Bodenhamer

Asian Hate Crimes in America  
Mitchel Hamm  
Jade White  
JC Callahan  
Addison Hillyard  
Faculty Mentor(s): Aysha Bodenhamer

The Effects Of Religion On Politics  
Brice Sallade  
Chris Ammerman  
Delgado Hicks  
Hannah Craft  
Faculty Mentor(s): Aysha Bodenhamer
Virtual Multidisciplinary Session 1  
Thursday December 2nd, 9:30 am – 10:45 am  
Zoom Meeting ID: 921 0916 1490  
Password: WinterCARD 

The Effect of Growth Medium Sulfate Concentration on the Health and Nutritional Value of Kale Plants  
Binuk Samarasinghe  Sydney Eubank  Karol Falu-Ramos  Rosette Nsoumbi  Peyton Rader  
Trerese Roberts  Brandy Yarmah  
Faculty Mentor(s): Mark Frazier 

Managing Made Easier  
Michaela Jarrett  
Faculty Mentor(s): Hwajung Lee 

A Mixed Methods Multidisciplinary Examination of Diversity in Education  
Montasia Braxton  
Faculty Mentor(s): Twange Kasoma 

The Vitality and Necessity of Local Museums  
Grace Atallah  
Faculty Mentor(s): Carlee Bradbury 

Virtual Citizen Leader Session  
Thursday December 2nd, 4:00 – 4:50 pm  
Zoom Meeting ID: 987 1044 4432  
Password: WinterCARD 

Citizen Leader students learn to Connect – Engage – Lead by completing coursework, attend events on campus, participate in community activities, and dive deeper with an immersive experience. In this forum you will hear from our student, Brie Flanagan, as she shares her personal journey to become an effective Radford University Citizen Leader. 

The Pillars of Brie: Supporting Her Community  
Brie Flanagan  
Faculty Mentor(s): Jean Mistele  Pam Frasier
Virtual Sociology Session 3  
Friday December 3rd, 10:00 – 10:50 am  
Zoom Meeting ID: 971 5948 6618  
Password: WinterCARD  

Mental Health And The Black Community  
Dylan Thompson  Davonte Mosley  Javonte Walker  Jessica Rose  
Faculty Mentor(s): Aysha Bodenhamer  

Abortion Through God’s Eyes  
Peyton Hurd  Cali Jacobs  Logan Sheeran  
Faculty Mentor(s): Aysha Bodenhamer  

Virtual Sociology Session 4  
Friday December 3rd, 4:00 – 4:50 pm  
Zoom Meeting ID: 971 5948 6618  
Password: WinterCARD  

Gun Control in the United States  
Gardner Branscom  Diana McDavis  Courdae Gravely  
Faculty Mentor(s): Aysha Bodenhamer  

Cults and Their Impact on the Community  
Caroline Frink  Alexandra Moreno  Caitlin Smith  Justin Barnard  
Faculty Mentor(s): Aysha Bodenhamer  
Abortion Access  
Brett Surface  Destynee Spruill  Nakari Terry  Pauline Bonner  
Faculty Mentor(s): Aysha Bodenhamer  

Stereotypes With the LGBTQ+ Community  
Manae Gray  Shaniyah Boothe  Chase Underwood  Eden Marquis  
Emma Varnier  
Faculty Mentor(s): Aysha Bodenhamer
See you next year!

RADFORD UNIVERSITY

Office of Undergraduate Research and Scholarship