

FROM THE CREEK BANK TO THE CLASSROOM: USING BLUE THUMB TRAINING IN EAST CENTRAL UNIVERSITY'S WATER RESOURCE POLICY AND MANAGEMENT MASTER'S DEGREE PROGRAM



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East Central University

**Department of Political Science, Legal Studies, and
Sociology** www.ecok.edu/psls

**Water Resource Policy and Management Master's
Degree Program** www.ecok.edu/wrpm

Outline of the Presentation

1. Introduction
2. The ECU WRPM
3. Blue Thumb
4. Benefits of Using Blue Thumb in the WRPM Curriculum
5. Conclusion
6. Acknowledgements

Water Resource Policy & Management



An interdisciplinary Masters of Science

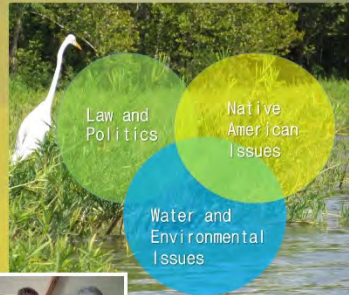
30 Hours

Required Courses (21 credit hours)

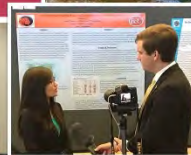
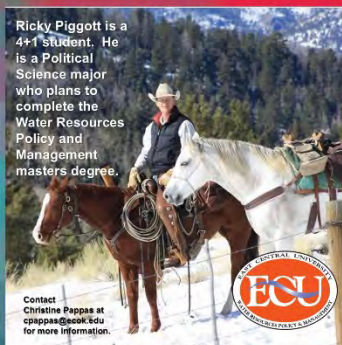
WRPM 5103 Policy Research and Methodology
WRPM 5203 Natural Resource History & Policy
WRPM 5303 Water Resource Policy Analysis
WRPM 5403 Water Law
WRPM 5503 Environmental Conflict Management
WRPM 5603 Water Resource Economics
WRPM 5703 International Environmental Policy

Elective Courses (9 credit hours)

WRPM 5113 Advanced Native American Law
WRPM 5213 Advanced Public Policy Making
WRPM 5313 Native American Water Rights
WRPM 5413 Public Organization Theory
WRPM 5513 Advanced Watershed Management
WRPM 5613 Hydrogeology
WRPM 5713 Advanced Water Quality and Treatment
WRPM 5813 Studies in Environmental Toxicology



Consider becoming a 4+1 student!



Program Mission: The program requires students to integrate and synthesize knowledge from multiple disciplines to address the complex challenges of water resource decisions. Water resource management requires students to develop solutions that are socially acceptable, politically and economically viable, and environmentally sustainable. Students will be broadly trained to undertake careers in managing water resources and in guiding or making water resource policy decisions.

Start the Program Fall, Spring, or Summer

For more information contact:
Dr. Christine Pappas
Department of Political Science and Legal Studies
580-559-5640 or cpappas@ecok.edu

Apply online to ECU at:

www.ecok.edu/wrpm

Completely online options available.

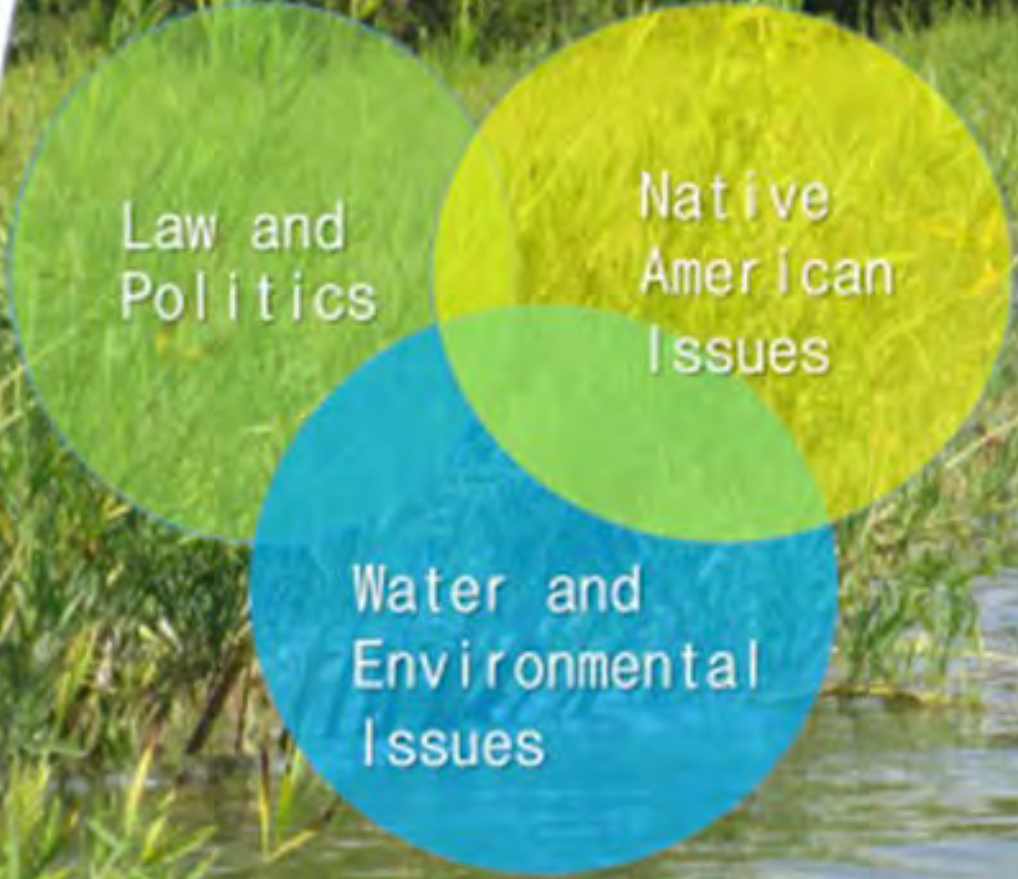
The Master's can be completed in one calendar year.

The ECU WRPM

- We work hand in hand with Executive Director Susan Paddack and the Oka Institute at ECU



WATER RESOURCE POLICY AND MANAGEMENT @ ECU



Law and
Politics

Native
American
Issues

Water and
Environmental
Issues

WWW.ECOK.EDU/WRPM



Water Resource Policy and Management Faculty

Dr. Erick Ananga

Dr. Terrie Becerra

Dr. Christine Pappas

Dr. Charles Peadar

Dr. Guy Sewell

Dr. Doug Weirick

Adjuncts

Leslie Taylor, J.D.

Native American Law

Krystina Phillips, J.D.,

Water Law





Social Science Research Colloquium @ Kerr Lab Jan 25, 2017



FIVE ECU FACULTY WORKING WITH OKA' INSTITUTE



Five ECU faculty members are the inaugural Summer Research Opportunity Award winners for the Oka' Institute, it was recently announced. Dr. Randall D. Maples, assistant professor in ECU's Department of Chemistry;



Dr. J. Bruce Moring, assistant professor in the Department of Biology; Dr. Terrie Becerra and Dr. Erick Ananga, assistant professors in the Department of Political Science and Legal Studies and



Dr. Nicholas Jacob, assistant professor in the Department of Mathematics and Computer Science developed proposals that are consistent with the Oka' Institute's research projects of enhancing aquifer recharge and groundwater and surface water interaction.

Congratulations Dr. Becerra and Dr. Ananga for being selected as Oka Institute Research Faculty!

Their project investigates residential water use patterns in Ada.

Skyler Riddle and Ricky Piggott were selected as Research Assistants on the project.



Ricky Piggott is a 4+1 student. He is a Political Science major who plans to complete the Water Resources Policy and Management masters degree.

**Contact
Christine Pappas at
cpappas@ecok.edu
for more information.**



**4+1
students
Garrett
Fuchs
and
Babita
Dangol
were
recently
hired by
Oka as
Interns**

Water Fest 2017



Water Resources Association

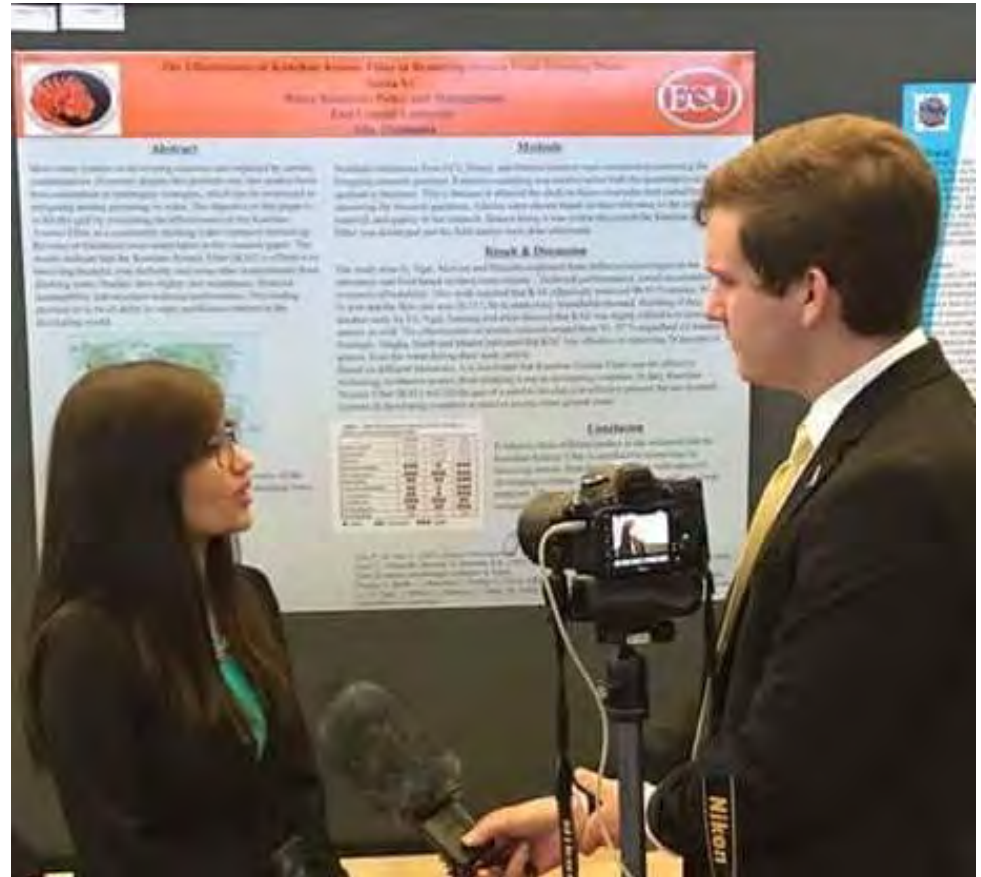


President:
Taylor Hunter

- All WRPM students are members of this Association
- WRA is working on a project to conserve water in ECU residence halls

Learning Objectives of the Program

1. BUILD RESEARCH SKILLS
2. CONTRIBUTE KNOWLEDGE
3. POLITICAL CAPACITY
4. INTEGRATE KNOWLEDGE
5. LEARN LAW AND POLICY



The Blue Thumb Program

- <http://www.bluethumbok.com/>
- Oklahoma's Blue Thumb is a statewide citizen science program that trains volunteers to monitor creeks and streams and share their knowledge of water quality with others. The goal of Blue Thumb is to empower people to protect water in their region from nonpoint source pollution.



The Blue Thumb Program

- In Oklahoma, over 300 volunteers monitor 80 streams.
 1. Biological Monitoring
 2. Physical Monitoring
 3. Chemical Monitoring
 4. Data quality and interpretation



Students without a science background are not familiar with these parameters and skills.

Training, March 2017



Blue Thumb

Water Quality Education Program Oklahoma Conservation Commission

- We monitor Little Sandy Creek every month.



Monitoring, Fall 2018





www.ecok.edu/wrpm

*The best classrooms
aren't classrooms.*

Blue Thumb Water Education



Educating the next generation . . .
Everyone lives downstream



Enviroscape

Benefits of Using Blue Thumb in the WRPM Curriculum



1. Recruiting of Students



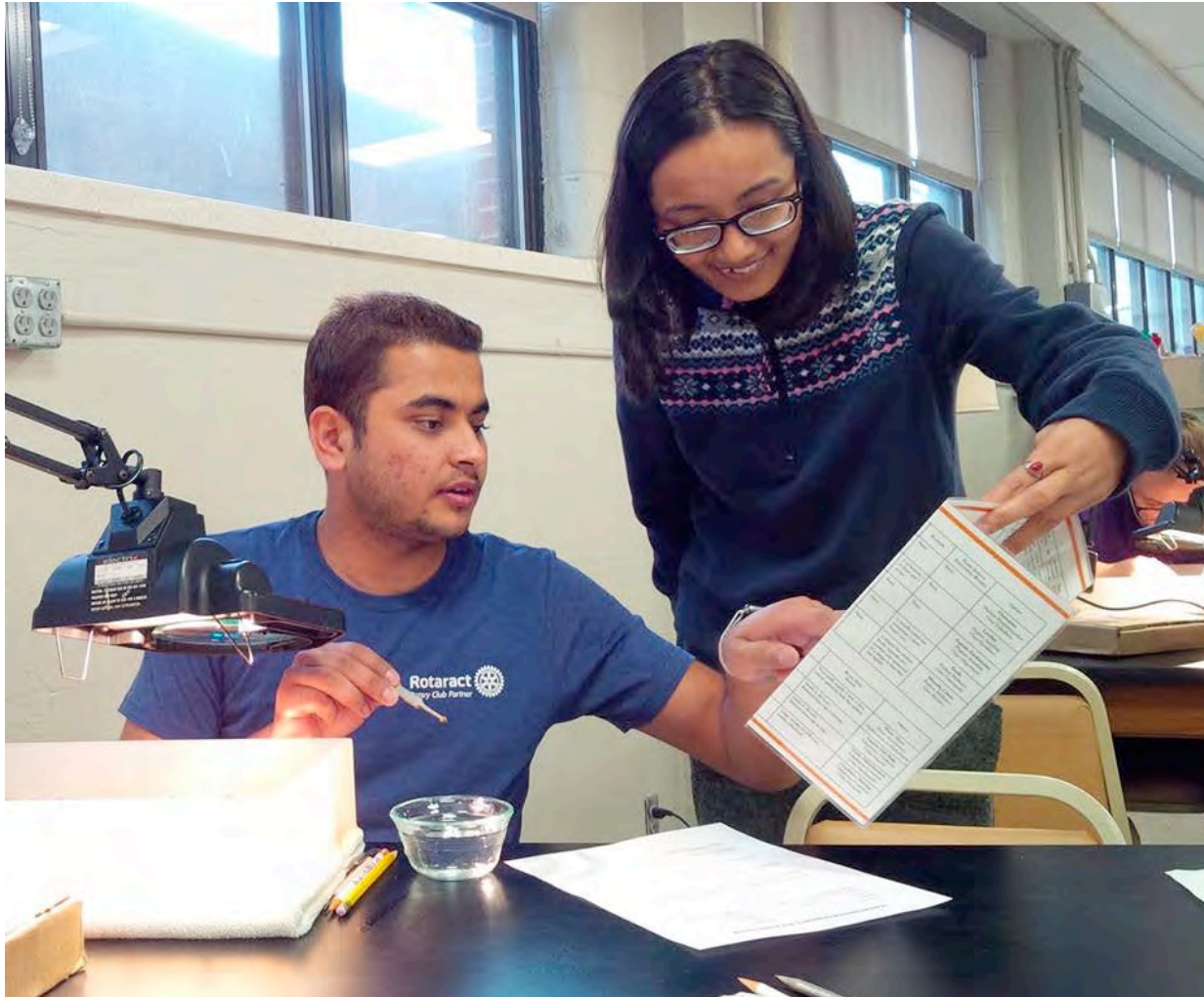
2. Create important bonds between students and faculty



3. Students and faculty contribute to Oklahoma's water management



4. Students develop hands-on skills that improve job prospects



5. Subjects learned in the field build curiosity in the classroom

- *This helps retain students who may not know what to expect with a program like this one.*





*The best classrooms
aren't classrooms.*

**Our relationship is mutually beneficial:
The WRPM helps Blue Thumb . . .
Blue Thumb helps WRPM**

Acknowledgements

- *Thank you* to Rob Barossi at Blue Thumb for being an awesome liaison and encouraging us to present today.
- *Thank you* to Oklahoma Conservation Commission for hosting us at this conference.
- *Thank you* ECU for creating the Water Resource Policy and Management Program.

Abstract

In March, 2017, faculty and students from East Central University's (ECU) **Water Resource Policy and Management Master's Degree** attended the two-day **Blue Thumb** training in Ada, Oklahoma. About 20 of us have now been trained to monitor streams and we are now monitoring Little Sandy Creek in Ada every month. **This training has enhanced ECU's master's degree program in several ways.** First, it has helped recruit new students who are interested in learning the hands-on skills related to water testing. Second, it has helped build bonds between faculty and students and among the students. Third, allows both faculty members and students to feel like they are participating in the State of Oklahoma's water management. The Blue Thumb training, stream monitoring, and other tasks build skills in our students they would otherwise not be able to attain in this policy-based master's degree.