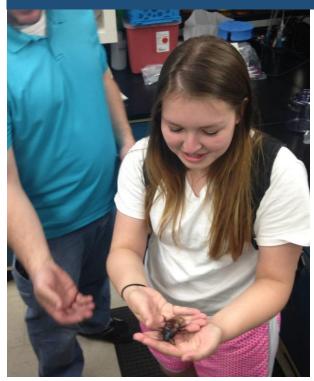


# SURP Report 2017







### **Disclaimer Statement**

Survey responses recorded in this report were supported by the National Institute of General Medical Sciences of the National Institutes of Health under Award Number P20GM103442. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Program Improvement Plan.....11-13

### **Acknowledgements**

The NDSU INBRE program staff thanks the SURP 2017 scholars, presenters, partners, and guests for participating in this year's program. It would have not been successful without all of you. Miigwech, Pilamaya/e, Pidamaya/e. Thank you.

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### **Report Summary**

There has been a growing need for American Indian and tribal researchers to enter the biomedical and related fields. North Dakota INBRE addresses this need through building the research capacity of North Dakota institutions and tribal colleges. A focused approach to achieve this goal is to increase the number of tribal college students who matriculate into baccalaureate programs in science. North Dakota State University (NDSU) INBRE serves as a mechanism to carry out this desired increase through three main projects: the Tribal Air Quality Pilot Project, distance learning training modules, and the Summer Undergraduate Research Program (SURP). SURP is a 2 week program for North Dakota tribal college students that reviews research methods and biomedical and related careers. Recently completing the third year of the program, the curriculum was piloted to model a 1 credit college course equipped with assignments, quizzes, a final, and individual presentations. To accommodate the needs of the target population, the program provides housing, meals, travel assistance, and a completion fee.

This year's program was held a week later than in SURP 2016 to allow for more students to participate without overlapping summer courses. Although the program dates, held May 22, 2017-June 2, 2017, gave students the option to gain a short-term research experience before summer programs and courses began, it fell on Memorial Day which deterred several prospective applicants. The SURP planning team has discussed strategies to increase recruitment for next year to meet the overall goal of North Dakota INBRE. This year's program featured two excellent students from local tribal colleges. The program has generally had small cohorts of students. The results of this cohort and previous cohorts is a testament to the impact of the program on students and the overall goal of NDSU INBRE.

Since the program's inception in 2015, SURP has impacted nearly 15 tribal college students. Of this number, 7 were male and 8 female. It has reached over 11 sophomores, 3 freshman, and 1 high school senior. Currently, 6 students have matriculated to North Dakota State University and 2 have matriculated to the University of North Dakota.



### **SURP Goals**

SURP 2017 goals are comparable to the goals in previous years. SURP staff partner with North Dakota State University departments that work in STEM and public health-related research to achieve the program goals. A copy of this year's schedule is on page 15. SURP staff also abide by the NDSU INBRE Key Values: Respect, Honesty, and Motivation (www.ndsu.edu/publichealth/inbre). There are 4 goals the program strives to accomplish:

Goal 1: Engage tribal college and university students in research

Goal 2: Increase the understanding of research methods

Goal 3: Professional Development

Goal 4: Networking

### **SURP Evaluation**

Students accepted into SURP complete a questionnaire at the beginning of the program and again at the conclusion of the program. Questions assess the students' familiarity with topics covered in the two week program. Students complete paper questionnaires and their responses are entered into the online survey tool, Qualtrics. Only program staff have access to the stored questionnaires and login for Qualtrics. In addition to the questionnaires, students in this year's program gave constructive feedback at the end of week 1. Although there were two students in the 2017 cohort, their responses are valued and will be shared.

### SURP 2017 Pre-survey

Pre-survey ask students' demographic information, their goals for the program, and on a lickert scale from 1 to 5 how interested and familiar they are with research. Refer to page 21 for copies of the pre-survey.

### **SURP Student Academic Majors**

Agricultural Economics
Architecture
Biology/pre-med
Biology/pre-nursing
Computer Science
Electrical Engineering
Mechanical Engineering
Psychology



SURP Students at the USDA lab tour.

We asked students how interested they are in a career in public health on a scale from 1 to 5, (1=not interested and 5=extremely interested).

Both students responded with "moderately interested."

We also asked students how interested they are in a career in STEM using the same scale from 1 to 5.

Both students responded with "moderately interested."



SURP students & mentor, Siobhan doing a brain activity

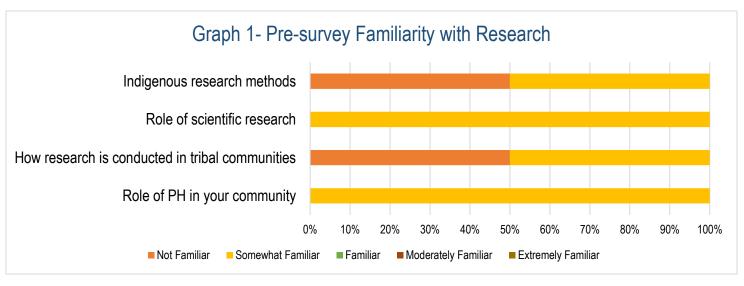
The questions in the pre-survey reflect the introductory curriculum of the program. Often, students accepted into the program are not very familiar with public health programs and concepts. Their perceptions of what public health is quite different at the end of the program compared to the beginning. A common remark students say throughout the program is, "I thought public health was like public health nursing." Students demonstrate they acquire a much broader view of health, research and public health-related careers at the end of the program.

A valuable question on this survey asks students about the goals they want to accomplish during the program. Their responses were:

- "Learn more about research"
- "Learn new things"
- "Learn how to do research methods"
- "Learn the poster setting and how to present."

The program staff do not ask if students met their goals at the end of the program, but rather, informally through open dialogue and daily conversations with the students. This form of measurement of students meeting their goals has proven to be more effective than asking them in a survey format. Students have a tendency to provide more context for their answers in an open conversation, which further assists program staff in evaluating the program. Both students mention they met their goals at the close of the program.

Graph 1 shows student responses to questions about their familiarity with research. Both students perceived they were somewhat familiar with the role of public health in their community and the role of scientific research in their community. Both students' perceptions of their familiarity with how research is conducted and indigenous research methods were equally split between somewhat familiar (golden yellow), and not familiar (orange).



### **SURP Mid-point Evaluation**

Students were asked open ended questions at the end of the first week to assess the orientation, assignments, education format, and satisfaction with the program. Student responses are below in the shaded boxes. This year's welcome and orientation included guests from the Native American community. **Representatives from the Fargo Native American** 

#### **Welcome & Orientation**

What are your thoughts on the orientation and welcome?

"Awesome. The singers, granola, humor. I wasn't expecting all of that."

"Very welcoming."

### Is there anything you would change or add?

"Discuss the 2 weeks more in-depth."

"Nothing, like the relaxed atmosphere."



Pictured above: Dr. Donald Warne at the SURP Welcome

Pictured on bottom: Willard Yellow Bird (MHA), Spiritual Advisor

Pictured to the right: SURP students taking a quiz



Commission attended the opening ceremony to welcome SURP students to Fargo; they also provided a brief history of the Native American Commission. Spiritual leaders from the Fargo-Moorhead community offered a ceremonial blessing and traditional songs. Other welcoming remarks came from Department of Public Health Chair, Dr. Donald Warne (*Oglala*), and the Office of Multicultural Programs Director, Jaclynn Davis Wallette (*Ojibwe*).



#### **Assignments**

How do you feel about the coursework that has been assigned?

"Planned out nicely. Not too much pressure."
"Good- not too much."

How would you describe the Research is Ceremony book to someone else?

"Hard to read. Big words. Conceptually good."
"Google words. Hard to read at first."

How well do you feel the assignments help you to learn? Why?

"Very well. I didn't know about the Do's and don'ts of research (human protections)."

"Good. They're about research."

Which assignments/activities have you learned the most from?

"Public health presentations. [O]nes with Humor." "Guest speakers."

#### **Education Format**

What are your thoughts on the way the material is presented?

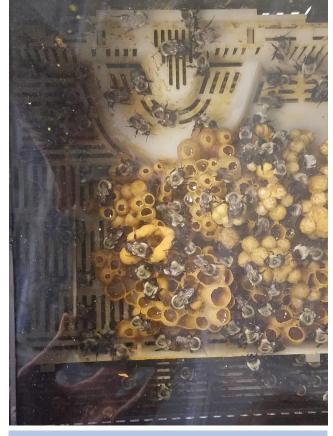
"Like the stories incorporated into presentations."
"Learn a lot from the PowerPoints."

From the course activities, which style of learning has been most useful to you (i.e. lecture, activities, groups)? "All."

"Humor."

This year's curriculum mirrored the minimum requirements of a pass/fail summer course for 1 college credit to prepare for SURP 2018. Students followed a syllabus outlining assignments and the learning outcomes of the course. As part of the course material, each student received a copy of *Research is Ceremony* by Shawn Wilson in addition to case studies, public health research, and related articles.

Several sessions were presented with PowerPoint and in-class activities. Short videos, handouts on public health, and guest speakers were included in the presentation of course material. A topic that has proven to be an eye-opener is the Institutional Review Board module covering human protections in the case of the Havasupai Tribe. Other sessions were discussion-based, hands-on in lab tours, or involved critical thinking activities.



Pictured above: Bee's students observed in the USDA lab
Pictured on bottom: SURP student pipetting her DNA sample

#### **Satisfaction**

Which sessions have been your favorite so far?

"Labs, Hands-on activities. Health breaks."

"USDA lab tour and other lab tours."

#### Which sessions have been your least favorite so far?

"NDSU transfer/grad school information is too long. Shorten it into 1 hour and have more research sessions."

"NDSU programs sessions, it's all too long. Put them all into a 1 hour session like a fair format."

Lab tours included: the Center for Nanoscale Science and Engineering, Plant and Food Sciences, and the USDA Insect Cryobiology lab. Students also toured the Fargo VA Medical Center to learn about career and research opportunities. Other hands-on activities included a presentation on genetics by Dr. Lyle Best, affiliated with Turtle Mountain Community College. They did an activity to replicate their DNA taken from a mouth swab or saliva. The NDSU Graduate School, transfer information, TRIO/SSS, and the Career Center also presented to the students.



## Have your academic or career goals changed after participating in SURP?

"Yes. I generally wanted to just be a nurse, but now coming here I want to be more so a nurse in public health."

## Which of the lab tours did you find most interesting?

"VA tour. I learned more on their programs and what the VA has to offer in my field."

"[I] liked Siobhan's the most and I did my presentation on research of hers. I also like the bee tour."

What are the most valuable things you learned after participating in SURP?

"The 10 essential services of Public Health."

Would you recommend SURP to your peers or other students interested in learning more about research?

"Absolutely."

"Yes, very much so."

## If you could change anything about the program, what would you change?

"Working on our research projects earlier"

"Work on our research project earlier."

Both students felt working on their final projects at the beginning of the week 2 didn't provide them with enough time to develop a sound presentation they were comfortable delivering. Program staff will work on adjusting next year's schedule to allow students more time to work on their final presentation.

### SURP 2017 Post-survey

Post-survey asks students the same set of questions in the presurvey as well as scaled questions on their SURP experience and satisfaction with the program. Open ended questions are shown in the side panel.

We asked students at the conclusion of the program, how interested they are in a career in public health on a scale from 1 to 5, (1=not interested and 5=extremely interested).

Both students responded with "extremely interested."

We also ask students how interested they are in a career in STEM using the same scale from 1 to 5.

One student responded with "moderately interested" and the other "extremely interested."



Pictured above: SURP students taking a tour of Plant and Food Science greenhouse projects as they relate to human health

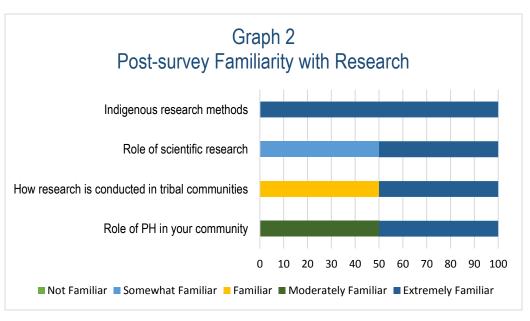
We asked students on a scale from 1 to 5, (1=definitely not, 5= definitely yes), do you feel there is someone at NDSU you can speak with if you have questions about continuing your education here?

Both students' responses were "definitely yes."

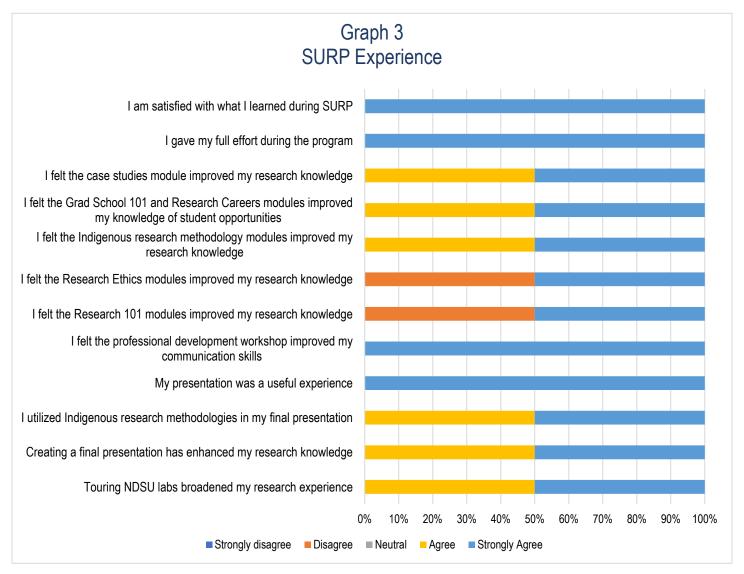
All faculty and staff that present to the students during the program are open to stay in contact after the program concludes. There were 2 faculty-mentors that were a part of this year's program; Dr. Donald Warne and Dr. Siobhan Wescott (*Athabascan*). Both assisted students in developing ideas for their final presentations.

After the program, both students felt they were extremely familiar with indigenous research methods, shown in Graph 2 in

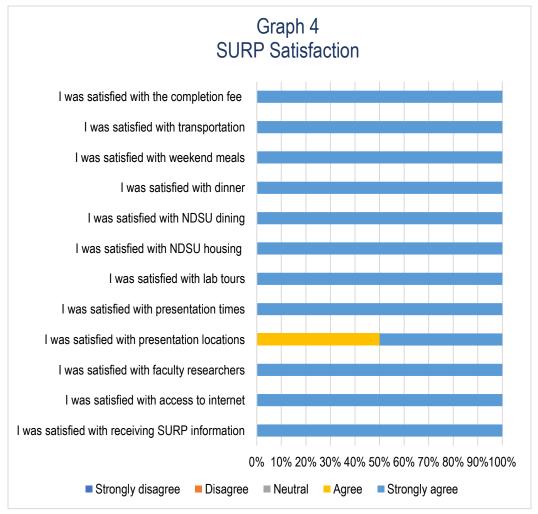
blue. For the role of scientific research one student felt somewhat familiar and the other student felt extremely familiar, shown in light blue and blue, respectively. From this response, program staff can work to make improvements on the scientific research content presented. Their understanding of how research is conducted in tribal communities is shown in Graph 2. Both students also improved their understanding of the role of public health in their community, also shown in



Graph 2. These results show the impact SURP curriculum has on student knowledge.



Graph 3 shows student responses to scaled questions on their SURP experience. **Overall, students either agreed or strongly agreed that the sessions in the program improved their research knowledge.** The responses marked as "disagree", shown in orange, will be target areas for program staff to improve the content provided. If necessary, program staff will follow up with the students on their responses to these two questions. Program staff will re-assess this year's curriculum in the development of SURP 2018 to offer 1 college credit. An outline of their final presentations is in the shaded panel to the right.



Overall, students were satisfied with the organization of SURP. **Student satisfaction with the program is a yearly goal program staff strive to achieve**. Their satisfaction contributes to the recruitment and success of the program.

Major changes from SURP 2016 were the housing options, meals, and completion fee. SURP 2016 program dates also left staff with limited options for housing (see SURP 2016 Report). This year, students were housed on the NDSU campus. Breakfasts and dinners in SURP 2016 were provided by Concordia College dining services and lunch by NDSU Catering. SURP 2016 students suggested providing more options for meals to improve the program. This year, NDSU Catering provided more options with breakfasts, the Memorial Union provided lunch and local restaurants provided dinner. The program was not able to utilize the NDSU's residence dining center (RDC). The program dates occurred before it opened for the summer and with a small group, it was not cost-effective for the RDC to

## Final Presentation Guidelines

- Individual presentation
- Oral or Poster
- Must be on least 1 of the 10 essential services of Public Health to address a health disparity

### **Background Section**

- Background provides evidence of the health disparity
- Provide a clear rationale for researching the health disparity

#### **Methods Section**

- Describe current research or work being done on health disparity
- Demonstrate understanding of the methods or measurement used in current work
- Explain the proposed method for addressing the health disparity

## Discussion/Results Section

- Explain the outcomes of the proposed method for addressing the health disparity
- Identify ways to further current research or work
- Provide at least 1 prevention or intervention method

#### **Sources Section**

Follow APA style



South Dakota American Indian ACE study

American Indian: Adverse Childhood
Experiences (ACEs)

Order of the American Indian: Adverse Childhood
Experiences (ACEs)

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Pictured at top: SURP student presenting her poster on Substance Use
Pictured above: SURP student oral presentation on Adverse Childhood Experiences
Pictured below: SURP students enjoying the closing ceremony with a couple of the program
staff

open specifically for SURP. In SURP 2016, due to administrative processes completion fees were available 2 months following the program. However, SURP 2017 students received their completion fee over the course of the program. A portion was ready for them at the beginning, middle, and end of the program. A completion fee is the NIH term for stipend.

Each year, program staff reflect back on the survey responses and comments from SURP students. Their responses, suggestions, and comments are highly valued for strengthening the program. A copy of these questions are found on page 23.

### Fun Fact!

The 5 tenets of Nation Building was a new module introduced in this year's program. The goal of adding this to the program was to bridge public health research, conducting research in tribal communities, and how it contributes to decision making, data sovereignty, and programs within a tribe.



### **Program Improvement Plan**

There are standout improvements to work on for SURP 2018 that are not discussed in the surveys. They include:

- 1. Timing of the program
- 2. Number of staff assisting during the program
- 3. Type of team building activities

Timing of the program has consistently been a challenge for program staff to identify an opportune time to engage the most students. Program staff learned that hosting the program 1 week following the end of Spring Semester resulted in student burnout. Staff overlooked Memorial Day celebrations and powwows that occur in tribal communities when hosting the program 2 weeks following Spring Semester. This time frame also doesn't allow tribal high school students to participate in the program as they finish their school year. Hosting the program in June often overlaps with summer sessions or summer research at tribal colleges. Other challenges in recruiting potential students are competition from larger research programs (i.e. REUs), students' obligations to family, and coordinating their summer employment schedule to accommodate for program dates. These all contributed to low recruitment for SURP 2016 and 2017.



Pictured above: SURP students observing bees in the USDA lab tour

Ensuring there is an adequate number of program staff to assist SURP students contributes to the function, student satisfaction, and overall success of the program.

In previous years, the program has had at least 2 staff who assist SURP students with getting oriented to NDSU's campus. However, there is a need for more staff to assist students with the program. More program staff was also a suggestion from previous SURP cohorts. To remedy this, SURP hired a chaperone for this year's program who assisted with these duties. In general, this approach to increasing staff ensured there was sufficient help for the functioning of the program. This will be a point of discussion for the program staff in planning SURP 2018.

Team building activities provide the opportunity for students to interact with one another and staff. This year, team building activities included a field trip to the Plains Art Museum, Thunder Road, and Dr. Warne's outdoor barbeque. Each year, Dr. Warne invites the students to his home to further welcome them to Fargo and to celebrate their accomplishments. The benefit of incorporating team building activities into the program builds comradery and leaves students with a positive association to the program. To continue this portion of the program, staff have discussed other trips to take students on i.e. 1 day trip to Valley Fair and the Mall of America. The following list provides other strategies to continue impacting students.



SURP students discussing their favorite activities at the closing.

- Select June program dates to recruit tribal high school students.
- Including at least 2 chaperones to assist SURP students during the program.
- Include NDSU programs into a 1 hour Information Fair.
- Choose a field trip in advance and highlight it with the application information.
- Provide time for students to work on final projects in Week 1.

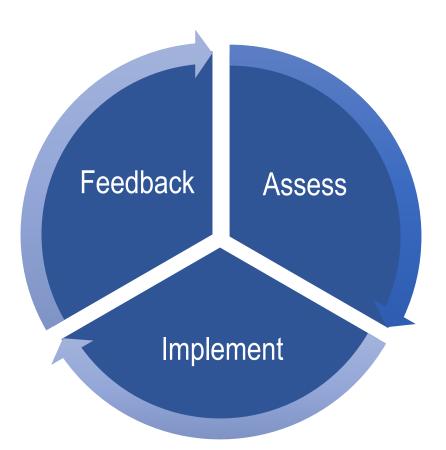
Another strategy to improving the program is for staff to review the research curriculum. On the post-survey, student responses indicated they did not feel the Research Ethics or Research 101 modules improved their research knowledge. Also on the post-survey, a student responded that they were not familiar with the role of scientific research. These marks are going to be focus points for curriculum improvement for the next SURP cohort.

### **Strategy Descriptions:**

- 1. Selecting dates for the program to run during June will provide an opportunity for tribal high school students to participate
- Including at least 2 chaperones (1 female and 1 male) to assist students, serve as resident assistants, and mentor the students during the program will further support recruiting tribal high school students for the program
- Inviting NDSU programs to present to the students in the style of a Fair will provide more time to work on research projects and participate in research activities
- 4. Highlighting a larger team building activity when recruiting, such as a field trip, can be a way to increase interest in applying for the program. It can also provide a great experience for students in the program.
- 5. Including more time for students to work on their projects will help them feel more prepared to present.



SURP students and staff in front of the A. Glenn Hill Building following the SURP closing ceremony held at the Alumni Center.



and research activities following

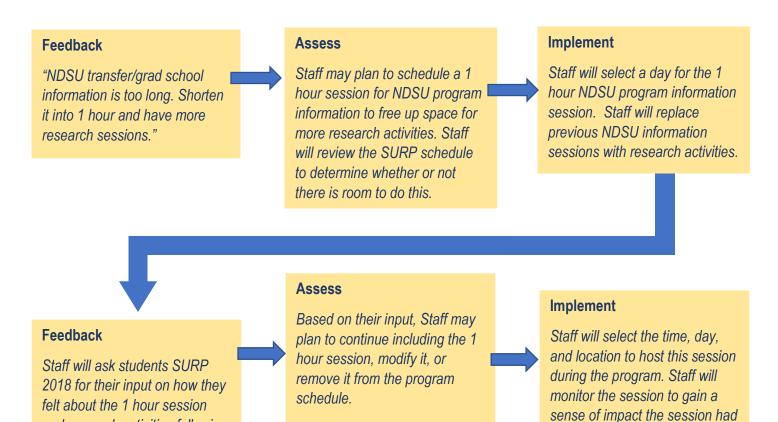
it.

### **Program Improvement Model**

Pictured to the left is the process program staff use to constantly improve SURP. Feedback from students on their survey responses, midpoint evaluation, and from open-conversations with staff provide valuable input of where the program is lacking. Staff use this input to determine whether or not making a specific change will be feasible, beneficial to students, and more importantly, improve the program. Staff discuss the student input with survey responses and strategize to make necessary changes for implementation. Staff ask students in the subsequent cohort for general feedback as well as specific feedback on the changes implemented. Then their feedback cycles through the process of assessing and implementing. This method has proven to work well for making changes and improving the program each year. In the shaded boxes below are examples of this process in action.

on students and re-assess upon

conclusion of the program.



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### **SURP 2017 Partners**

SURP staff would like to thank this year's partners:

Biological Sciences/USDA Cryobiology Lab

Career Center

Center for Nanoscale Science and Engineering

Dr. Lyle Best, MD

Fargo VA Medical Center

**Graduate School** 

McGovern Alumni Center

Nueta Hidatsa Sahnish College- Science Department

Plant and Food Sciences/GIFSIA

The Learning and Media Center

Transfer Information/Office of Admissions

Tribal Nations Research Group

TRIO/SSS/McNair Scholars

Veterinary and Microbiology Sciences

Without your support and participation, SURP 2017 would not have been successful. Thank you!

## North Dakota State University PH 491

### Title: American Indian Public Health Research Seminar

Credits: 1

Term and Year: Summer 2017

Meeting Days: M-F

Meeting Time: 9:00am-5:00pm

Meeting Place: STEM Building

Instructors: Pearl Walker-Swaney, MPH

Allison Goldenstein, TA

Office Address: Department of Public Health

Research Park 2

PO Box 6050

Fargo, ND 58104

Office Phone: 701-231-6111

Fax: 701-231-5586

E-mail: Pearl Walker-Swaney: pearl.walker@ndsu.edu

Allison Goldenstein: Allison.goldenstein@ndsu.edu

Office Hours: By appointment only

### I. Course Information

Course prefix and number: PH 491

Title: American Indian Public Health Research Seminar

<u>Bulletin Description:</u> This course introduces undergraduate students to a variety of research techniques used in public health with a focus on American Indian populations. Studying indigenous research paradigms and research techniques in American Indian communities enhances health research in tribal communities. Broad topics discussed include health disparities, research methods, human protections, and indigenous research paradigms.

#### **Course Prerequisites**

None

Current information (e.g., syllabus) is available on BlackBoard. Once you are enrolled in the class, your BlackBoard page will list this course. Please check your email and BlackBoard regularly for updated class information.

#### II. Course Material

- 1. Required book: "Research is Ceremony" by Shawn Wilson
- 2. Additional handouts from the instructor will be available after registration. Handouts and assigned readings will be essential to the final review.
- III. Course and Undergraduate Learning Outcomes: At the end of this course, successful students will be able to:
  - 1. Name the 10 essential services of Public Health
  - 2. Identify indigenous research paradigm terminology
  - 3. Discuss research methodologies
  - 4. Describe the importance of human protections
  - 5. Interpret indigenous research paradigms
  - 6. Make a chart of nation building strategies that assists with decision-making in tribal communities
  - 7. Examine relationship building with tribal communities when conducting research

### IV. Student Activities to Promote the Undergraduate Learning Outcomes

Student activities include:

- 1. Attending all course sessions
- 2. Active participation in all course activities
- 3. Reading assigned material before course sessions
- 4. Completion of assignments
- 5. Quizzes, final review, and poster presentation

#### V. Student Workload

Current information is available in Blackboard. Please check your email and Blackboard daily for updated information. Slides and materials for sessions will be posted the day prior to that course session.

The course is taught in a traditional classroom setting and non-traditional classroom setting e.g. Grandmother's Garden. In addition, this course utilizes Internet-based sources, book and handout readings, and interactive discussions and activities. Writing assignments will be instructed by staff from the Undergraduate Writing Center.

Please read all assigned readings ahead of course sessions so that your participation is well-informed and you are prepared for quizzes and discussions. You will be expected to come to each session prepared to apply what has been assigned.

Date	Topic	Activity	Points	Task
5.22	Introduction to Public	Goals worksheet	5	Complete
	Health Research: The 10 Essential Public Health Services & Health Disparities	Poster presentation due Wednesday, May 30, 2017	30	Assigned
5.23	Overview of research:	Completion of CITI Modules due Monday, May 29, 2017	10	Assigned
	Research Design	Reading Quiz 1: Research is Ceremony Chapter 1	5	Quiz
		Tribal research case study handout	5	Quiz
		Drafted personal essay due Thursday, May 25, 2017	5	Assigned

5.24	Ethics in research and terminology of Indigenous	Reading quiz 2: Research is Ceremony Chapter 2 and case study handout	5	Quiz
	Research Methodologies	Tribal IRB module	5	Participation
		Research is Ceremony Chapter 3	5	Assigned
		Prepare a 2 minute mock speech introduction	5	Assigned
5.25	Building relationships	Reading quiz 3: Research is Ceremony Chapter 3	5	Quiz
	Indigenous Research	Mock 2 minute speech introduction	5	Due
	Paradigms	Building relationships and Indigenous paradigms module	5	Participation
		Chapter 4- Research is Ceremony	5	Assigned
		Final personal essay due Monday, May 29, 2017	10	Assigned
		Draft personal essay	5	Due
5.26	Research and decision-	Reading quiz 4: Research is Ceremony Chapter 4	5	Quiz
	making	Oral evaluations- SURP sessions week 1	10	Participation
		Nation Building v. Standard Approach activity	5	Participation
5.29	Nation Building Part 1: An Introduction	Draft a mock research proposal-due Wednesday, May 31, 2017	5	Assigned
		Final draft of personal essay	10	Due
		CITI Modules completion certificate	10	Due
		Research is Ceremony-Chapter 5	5	Assigned
5.30	Nation Building Part 2:	Decision-making and presenting data activity	5	Participation
	The role of Research in Decision-Making	Final draft of mock research proposal due sday, June,1 2017	10	Assigned
6.1	Final Review	Reading Quiz 5: Research is Ceremony Chapter 5	5	Quiz
		Written final review	15	Exam
		Oral final review	15	Exam
		Poster presentation practice run (sign-up sheet)	5	Participation
6.2	Poster Presentations	Poster presentations (see poster scoring sheet)	30	Due

### VI. Evaluation of the Learning Outcomes

Students will be required to complete daily assignments, actively participate, complete an oral evaluation of the course, complete knowledge based on written and oral reviews, and complete a poster presentation for the Summer Undergraduate Research Program 2017 Poster Session. The student must show evidence of active participation in all activities, as well as accurate completion of all assignments, quizzes, and examinations in order to receive a passing grade in this course. Participation points will be earned through attendance, assignments, and reading quizzes. Students will only be allowed to make-up work if the reason is justified or pre-arranged and approved by the Instructor. Points will be deducted for late work, and a zero assigned after one week. If you wish to contest a grade, it can only be done within one week of receiving the grade.

### Required Components (all components must be completed to receive a passing grade):

Participation 50 pts (5 per day)

Assignments 75 pts (see assignment schedule)

Final Review 15 pts (written)

15 pts (oral)

Poster Presentation 35pts

\_\_\_\_\_

Total 190 pts

This is a Pass/Fail course. To receive a passing grade in this course, students must score at least 114/190 or higher. Scores below this range will be considered an F or fail.

#### **Incomplete Grades:**

An instructor can assign a grade of incomplete, "I," when, due to extraordinary circumstances (e.g., sickness, death in the family, military leave etc.) the student was prevented from completing the work of the course on time. The assignment of an "I" requires that a contract be initiated and completed by the student before the last day of class, and signed by both the student and the instructor. The student specifies the time and manner in which the student will complete the course requirements. Extension for completion of the work will not exceed one year.

#### VII. Attendance

According to NDSU Policy 333, attendance in classes is expected. Only the course instructor can excuse a student from course responsibilities. (The term "course" includes class, laboratory, field trips, group exercises, and or other activities.) Veterans and student service members with special circumstances or who are activated are encouraged to notify the instructor as soon as possible and are encouraged to provide Activation Orders

#### VIII. Other Course Information, Academic and Student Policies

- 1. This course adheres to NDSU policies: http://bisonconnection.ndsu.edu/registration/policies/
- 2. **Disabilities or Special Needs:** Any students with disabilities or other special needs, who need special accommodations in this course, are invited to share these concerns or requests with the instructor and contact the Disability Services Office (www.ndsu.edu/disabilityservices) as soon as possible.
- 3. Academic Honesty Statement: The academic community is operated on the basis of honesty, integrity, and fair play. NDSU Policy 335: Code of Academic Responsibility and Conduct applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of Registration and Records. Informational resources about academic honesty for students and instructional staff members can be found at https://www.ndsu.edu/academichonesty/
- 4. **Professionalism:** We are committed to helping you grow professionally and prepare for a successful career. Therefore, we expect: attendance and punctuality, cell phones to not be used during sessions; abiding by the key values of respect honesty, and motivation; prompt response with instructors via email or in-person, library use and utilizing campus resources is encouraged.

### Useful Web site for research and background materials

- Centers for Disease Control and Prevention (CDC) available at <a href="https://www.cdc.gov">www.cdc.gov</a>
- World Health Organization (WHO) available at <a href="http://www.who.int/en/">http://www.who.int/en/</a>
- Healthy People 2020 available at <a href="https://www.healthypeople.gov">www.healthypeople.gov</a>
- American Public Health Association available at <a href="https://www.apha.org">www.apha.org</a>
- County health rankings: http://www.countyhealthrankings.org/#app/
- North Dakota Compass: http://www.ndcompass.org/

### SURP 2017 Agenda

Time	Sunday 5.21	Monday 5.22	Tuesday 5.23	Wednesday 5.24	Thursday 5.25	Friday 5.26	Saturday 5.27
8:30am		Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	
9:00am		Orientation	Research 101	Research Ethics	Research 101	TLMC poster workshop	
10:00am		Keynote	Indigenous	Computer lab	Writing	ND Compass-	
		Speaker	Research Methods		Workshop	Finding data	
10:45am			Health break	Health break	Health break	Health break	Brunch
11:00am		NA Commission Welcome	Transfer/Grad school Information	Indigenous Research Methods-	Indigenous Research Methods	Professional development	
				Anita, TNRG			
12:00pm		Luncheon	Lunch	Lunch	Lunch	Lunch	
1:00pm			TRIO/SSS/McN	CNSE lab	USDA lab tour	Plant & Food	
2:00pm		Campus tour	air Scholars & IWIN Program	tour		Science Lab tour	
2:30pm			Health break	Health break		Health break	
3:00pm			Writing Workshop	Faculty mentor meeting		Faculty mentor meeting	
4:00pm	Check-in	Program goals	Personal essay	Brain &	Homework	TCU	
	to Dorms	& pre-survey	workshop	Behavior activity	review	presentation Dr. Hartman	
5:00pm		Dinner	Dinner	Dinner	Dinner	Dinner	Dinner

Time	Sunday 5.28	Monday 5.29	Tuesday 5.30	Wednesday 5.31	Thursday 6.1	Friday 6.2
8:30am	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
9:00am	Free time	Nation Building	Research 101	Writing workshop	Genetics demo &	Check-out of dorms
10:00am 10:45am		Workshop Part 1	Special Topics: Animal Science	Indigenous Research Methods Health break	presentation	Student Final Presentations
11:00am			Fargo VA Tour	Computer lab/study		Awards & Blessing
12:00pm	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
1:00pm	Free time	Nation Building Workshop Part 2	Computer lab/study	Faculty mentor meeting	Final Exam	Travel song & Group pictures
2:00pm						Travel home
2:45pm			Health break	Health break	Health break	
3:00pm			Meet w/faculty mentor	Genetics demo & presentation	Final presentation prep	
4:00pm		Final Presentation Prep	Professional development			
5:00pm	Dinner	Dinner	Dinner	Dinner	BBQ at Don's	
6:00pm				Thunder Road		

## **SURP 2017 Pre-Survey**

Name:	
Gender:	
Age:	
Tribal Affiliation(s):	
College/School:	
Have you participated in any research projects outside of the classroom?	(If yes, please describe or list the research
project/projects).	

### **Program Goals**

**Demographics** 

Identify at least 2 goals you have for attending the SURP program.

1.

2.

#### **Scaled Questions**

Below are questions to help INBRE staff in the development of the program. The scale is from 1 to 5. 1= Not interested or not familiar, 5= Extremely interested or extremely familiar.

1. How interested are you in a career in public health?

1 2 3 4 5

2. How interested are you in a career in science, technology, engineering, or math (STEM)?

1 2 3 4 5

3. How familiar are you with how research is conducted in tribal communities?

1 2 3 4 5

4. How familiar are you with the role of public health in your community?

1 2 3 4 5

5. How familiar are you with the role of scientific research in your community?

1 2 3 4 5

6. How familiar are you with indigenous research methods?

1 2 3 4 5

## **SURP 2017 Midpoint Evaluation**

Welcome & Orientation.	These are questions that will	l assist program staff with	knowing if the orientation	was successful in

making the students feel welcomed and understanding the expectations.

1. What are your thoughts on the orientation and welcome?

2. Is there anything you would change/add?

Name:

**Assignments.** These are questions that will assist program staff in understanding the benefits of having assignments to provide course credit in the future of the program.

- 1. How do you feel about the coursework that has been assigned?
- 2. How would you describe the Research is Ceremony book to someone else?
- 3. How well do you feel the assignments help you to learn? Why?
- 4. Which assignments/activities have you learned the most from?

**Education format.** These are questions to assist program staff in understanding which teaching methods work best for student learning.

- 1. What are your thoughts on the way the material is presented?
- 2. From the course activities, which style of learning has been most useful to you (i.e. lecture, activities, groups)?

**Satisfaction.** These are questions that will assist program staff in learning which session's students have enjoyed or not enjoyed and the reasoning to improve the future program schedule.

- 1. Which sessions have been your favorite so far?
- 2. Which sessions have been your least favorite so far?

## **SURP 2017 Post-Survey**

### Demographics

Name:

Tribal affiliation(s):

### Open- ended questions

- 1. Have your academic or career goals changed after participating in SURP?
- a. No b. Somewhat c. Yes (please explain in the space provided below)
- 2. Which of the lab tours did you find most interesting? Why?
- 3. What are the most valuable things you learned after participating in SURP?
- 4. Would you recommend SURP to your peers or other students interested in learning more about research?
- 5. If you could change anything about the program, what would you change?

### Scaled questions

Below are questions to assist INBRE staff with the direction of program improvement. The scale is from 1 to 5. 1= not interested or not familiar and 5=extremely interested or extremely familiar.

- 1. How interested are you in a career in public health?
  - 1 2 3 4 5
- 2. How interested are you in a career in science, technology, engineering, or mathematics (STEM)?
  - 1 2 3 4 5
- 3. How familiar are you with how research is conducted in tribal communities?
  - 1 2 3 4 5
- 4. How familiar are you with the role of public health in your community?
  - 1 2 3 4 5
- 5. How familiar are you with the role of scientific research in your community?
  - 1 2 3 4 5
- 6. How familiar are you with indigenous research methods?
  - 1 2 3 4 5
- 7. Do you feel there is someone at NDSU you can speak with if you have questions about continuing your education here?
  - 1 2 3 4 5

The following questions are related to your SURP <u>experience</u>. Chose the answer that best describes your experience (1=strongly disagree, 5=strongly agree)

Question	1	2	3	4	5
Touring NDSU labs broadened my research experience					
Creating a final poster has enhanced my research knowledge					
I utilized indigenous research methods within my final poster					
My poster presentation was a useful experience					
I felt the professional development workshops improved my communication skills					

I felt the Research 101 modules improved my research knowledge			
I felt the Research Ethics modules improved my research knowledge			
I felt the indigenous research methods modules improved my research			
knowledge			
I felt the Grad School 101 and Research Careers modules improved my			
knowledge of student opportunities			
I felt the Case Studies modules improved my research knowledge			
I gave my full effort during the program			
I am satisfied with what I learned during SURP			_

Please rate your satisfaction with the <u>organization</u> of SURP according to the items listed below. (1= strongly dissatisfied, 5=strongly satisfied)

Item	1	2	3	4	5
Receiving information prior to SURP					
Access to a computer and internet					
Interaction with research faculty and staff					
Workshop and presentation locations					
Workshop and presentation times					
Lab tours					
Housing					
NDSU dining					
Dinner					
Weekend meals					
Transportation					
Completion fee					

1.	Yould you be interested in having a SURP reunion after the program concludes?  Yes
	Maybe
	No´
2.	How we contact you through the following methods in regards to a SURP reunion? (Select all that apply) Cell phonePrimary EmailAlternative Email
	Mailing addressFacebook (Group titled: NDSU INBRE)
	Twitter (twitter handle @ndsuinbre)
	Other:

### **SURP LOGIC MODEL**

Program goal: Engage tribal college students in biomedical research and related careers				
Stı	rategy	Action Steps	Metric	Responsibility
1.	Coordinate Summer Undergraduate Research Program	<ul> <li>Identify presenters</li> <li>Identify housing</li> <li>Arrange meal plan</li> <li>Develop sound recruitment plan</li> </ul>	<ul><li>Presenters confirmed</li><li>Housing confirmed</li><li>Meal plan secured</li><li>Applicant pool is full</li></ul>	<ul> <li>INBRE Project         Manager</li> <li>INBRE Graduate         Assistant</li> <li>INBRE Staff</li> </ul>
2.	Curricula actively engages students	<ul> <li>Schedule lab tours with hands-on activities</li> <li>Develop small group activities to foster team work skills</li> <li>Utilize didactic course work and activities to foster learning research methods and concepts</li> <li>Create space for team building activities</li> </ul>	<ul> <li>High scores on the post survey questions about lab tours and hands-on activities</li> <li>Positive feedback on small group activities</li> <li>Increased scores on level of understanding research methods and concepts</li> <li>Students bond</li> </ul>	<ul> <li>INBRE Principal Investigator</li> <li>INBRE Project Manager</li> <li>INBRE Graduate Assistant</li> </ul>
3.	Ensure program fosters mentorship and networking	<ul> <li>Set up student-faculty mentor pairing based on research interests</li> <li>Provide opportunities for students to meet other faculty</li> <li>Schedule event or social for students to network with academic and research programs</li> </ul>	<ul> <li>Students feel they can contact at least 1 person about academics or research</li> <li>Students can identify other potential mentors in their post-survey responses</li> <li>Students make connections to potential programs of interest</li> </ul>	<ul> <li>INBRE Project         Manager</li> <li>INBRE Graduate         Assistant</li> </ul>

## For SURP questions please contact:

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