

Science is real; Science is you.

Spring 2014

Wednesdays
1:30 - 3:20

184 Health
& Human
Services
Building



The words “science” and “research” evoke many different responses from students. Some are energized by the excitement of working to answer important questions. Others are nervous about being overloaded by technical terms and precise measurements. Research is the scientific tool that we use to answer questions about what things are and how they work.

Research will have an important role in your professional practice, no matter what career you end up having. Research provides us with information about typical development, differences and disorders, and evidence for best practices in assessment and intervention. In other words, even if you do not end up conducting research yourself, you will be a consumer of research.

In this class we’ll look at the *lifecycles* of research studies, from their births as questions through their development into productive members of society. As a class, we will examine two studies in depth and hear about other projects that are in progress. As individuals, you will participate in an ongoing research study with one of our faculty members.



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By the end of this experience you will:

- understand and remember key concepts and terms that apply to research in communication disorders
- identify and give details on questions being asked by individual research studies
- create your own research questions and determine ways to answer them
- be able to read and evaluate research articles and presentations
- understand how research in communication disorders is conducted and how it relates to clinical practice
- gain hands-on experience with research in communication disorders

Office Hours

Tuesdays
1:00 - 2:00

Wednesdays
3:30 - 4:30

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“Science is a way of thinking much more than a body of knowledge.”
- Carl Sagan

Classroom Sessions

The individual class sessions are designed around a discussion format. Each week we will have a set topic to talk about. Some sessions will include an associated reading, and others will not. Prior to each session, I will post the reading and a “preflection” worksheet for you to complete. Preflections are worksheets that focus and guide your reading. They are the opposite of “reflections” because they are done before and during the reading. Each preflection will ensure that you read the target material and guide you towards ideas and questions that you can use during the class discussions.

We will be focusing on two research articles into our discussions across the semester. These are Goberman, Hughes, and Haydock (2011) and Muttiah, Georges, and Brackenbury (2011). Both of these studies were developed and carried out by student researchers at BGSU. The articles are available on Canvas.

For this class to be effective, you must be an active participant. You are expected to contribute to each class session. This includes asking questions, answering others questions, and adding relevant information. The more spontaneous you can be with your contributions, the better. I will periodically call on people to find out what they are thinking and to bring them into the conversation.

Another part of being an active participant is how you react to others. There are things that we can all learn from each other, so we must treat each other with respect and dignity. This means allowing everyone to share their ideas and carefully considering their input. No one should ever be put down for his/her contributions.

To facilitate your understanding of why someone becomes a researcher, we will hear research presentations from some of the department’s current doctoral students. These students will do a 20 presentation about a study that they did and then talk with us about the study and their development as researchers.

“Men love to wonder, and that is the seed of science.”
- Ralph Waldo Emerson

Guided Research

You will spend one hour per week, in pairs, as a research assistant with a faculty member in CDIS (your research mentor). You and your mentor will determine your specific duties. Some activities that students in the past have worked on included searching for articles, developing stimuli, participating in data collection, scoring/coding data, and analyzing data. Depending on the project and its current status, you may be working on one or more of these activities. Likewise, you may be contributing to one or multiple studies.

Keep an eye open for all of the opportunities that are available through your guided research. Many students have continued working with their research mentors even after the course is complete. Some of gotten summer grants that pay for their work, others have presented at national conferences, and a few have published articles about their research.

“What is a scientist after all? It is a curious man looking through a keyhole, the keyhole of nature, trying to know what’s going on.”
- Jacque Cousteau

Grading Scale

There are three primary sources that will be used to determine your grade in this course.

I. Preflection

Each preflection will be worth 5 points. There will be ~ 10 preflections during the semester, for a total of 50 points.

II. Guided research review

Your research mentor will be asked to fill out a short review form based on your research participation. You and your mentor will discuss your performance half way through the semester (to allow for improvement if needed) and at the end of the experience. It is worth 50 points.

III. Paper and presentation

The paper and presentation will bring together your experiences in the classroom and with the guided research. The paper will be 6 to 8 pages long and worth 75 points. The presentation will be 20 minutes long and worth 25 points. Both will be completed with your research partner.

Your final grade will be determined by the percentage of the available points that you earn. Letter grades will be based on the following scale. This scale will be strictly adhered to.

A	89.5 - 100%	B	79.5 - 89.49%
C	69.5 - 79.49%	D	59.5 - 69.49%
		F	< 59.5%

About Dr. B.

I’ve been a faculty member at BGSU since 2001. Before that I worked as a clinician at a preschool for children with multiple disabilities. I teach and do research on child language development and disorders. Outside of work, I enjoy playing with my family, competing in endurance events, and raising money for cancer research.

“Play is the highest form of research.”
- Albert Einstein

Students with Disabilities

I want nothing to interfere with your ability to perform well in this course. If you have a significant problem that might weaken your performance, please talk to me and/or someone at the Disabilities Services for Students (DSS) Office. The goal of the DSS is to help provide equal access and reasonable accommodations to BGSU students with disabilities. You can contact them by phone at 372-8495, fax 372-8496, TTY 372-0582, or on the web at <http://www.bgsu.edu/offices/sa/disability/index.html>

Academic Honesty

As stated in the 2013-2014 student handbook: The Code of Academic Conduct The Code of Academic Conduct (also called the Academic Honesty Policy) is designed to enhance and sustain an environment of ethical and principled intellectual pursuit, consistent with the core values of the University. BGSU does not tolerate cheating, lying or stealing of property or ideas.

See me **before** doing anything that you suspect may violate these policies.

“Research is what I’m doing when I don’t know what I’m doing.”
- Wernher von Braun

Implied limited license

The classroom discussions that we will have and the materials that I will provide are considered to be my intellectual property. They are protected by state and federal regulations. Included in this intellectual property are the notes that you take. You are authorized, and expected, to take notes in this class. You may share these notes with anyone else in the class. However, you are not authorized to provide these notes to anyone outside of the class, sell them to anyone, post them on a web site, and/or make any commercial use of them without express prior permission from me. See me before you do anything that may possibly violate this policy.

Technology in the classroom

You are welcome to use laptops, cell phones, and other forms of technology within the classroom. However, they should only be used for completing classroom activities. You are not allowed to send or receive texts or calls that do not pertain to the class. If you are expecting a call that you must take, notify me before the session starts, set your phone to vibrate, and leave the room to take the call.

I reserve the right to confiscate technological devices that are not being used for classroom activities. You will receive them back at the end of the session.

Quotes from last Spring’s class:

“Somewhere, something incredible is waiting to be known.”
- Carl Sagan

The information was very informative and expanded my knowledge of research. I feel more comfortable with research now that I have more knowledge of the topic.

I’ve really enjoyed the research/mentor project because it allowed us to get a hands-on understanding of different aspects of research.

Instruction was energetic and insightful. Dr. Brackenbury opened up a whole new world I had no idea existed.

The reflections made the materials more understandable and gave us a chance to read more research.

I am seriously considering the bridge program now! I have learned a lot!

Class Schedule

The class is set up into ten different modules (or units). We will move together through each module, one at a time. The names of the modules and their approximate start dates are listed below. The dates are flexible, depending on the rate at which we move through each module.

Module	Approximate start date
Research Questions: The Birth of the Study	01/22/14
Literature Review: The Family History	01/29/14
Research Ethics: Society's Values	02/05/14
Research Methods: Parenting Approach	03/05/14
Data Analysis: Child Behaviors	03/26/14
Interpreting the Results: Parent-Teacher Conferences	04/02/14
Dissemination: Socialization	04/09/14
Peer Review: Socialization	04/16/14
Evidence-Based Practice: Productive Member of Society	04/30/14

"Nothing in life is to be feared, it is only to be understood.

Now is the time to understand more, so that we may fear less."

- Marie Curie

"Research is formalized curiosity. It is poking and prying with a purpose."

- Zora Neale Hurston

