GEORGIA COLLEGE
GEORGIA'S PUBLIC LIBERAL ARTS UNIVERSITY
Center for Teaching and Learning

October 2020
Issue 10
News Update
Center for Teaching and Learning

Focus on Faculty

As a highlight of this month's newsletter, the Center for Teaching and Learning (CTL) would like to share an interview with Dr. Catrena Lisse, Professor of Chemistry and Director of the Science Education Center at Georgia College, Dr. Rob Sumowski, Associate Professor and Program Co-Coordinator for Special Education, and Dr. Careccia, Senior Lecturer of Physics, on an upcoming project for Spring 2021: Women in STEM. Dr. Lisse, Dr. Sumowski, Dr. Whitlock, Dr. Careccia, and Ruth Eilers constitute the planning committee for the Women in STEM project.

What is STEM?

STEM represents science, technology, engineering, and mathematics, as well as all related fields.

How did you become involved in STEM?

Dr. Lisse was always the curious kid who asked all the questions and always wanted to know more - which she says is accurate for almost all scientists. She shared that for many kids, the programs offered through the Science Education Center at Georgia College are their first time experiencing science in a vibrant, hands-on way - and that can be transformative. "That's what happened to me," she says. "As an educator, the first time I felt the excitement from a child experiencing hands-on science, I knew there was no turning back."

Dr. Careccia's interest in science also began in childhood: her father was an engineer and physicist, and as a young girl, she followed him around, wanting to know how things worked. Her interests didn't align with typical expectations for girls in the 1960s and 1970s. Regardless, Dr. Careccia pursued her dreams, earned degrees in engineering and physics, and launched her scientific career. As a result, she is inspired to reach out to young girls and get them excited about science.

Why is gender inclusiveness important in the STEM subjects?

There is still a gender gap in science, technology, engineering, and math (STEM) related fields in today's society. According to the 2019 U.S. Bureau of Labor Statistics, women only make up 28% of the workforce in STEM, and men vastly outnumber women majoring in most STEM fields in college. The gender gaps are exceptionally high in some of the fastest-growing and highest-paid jobs of the future, like computer science and engineering.

Tell us more about the Women in STEM project.

The thought of a Women in STEM project came about since 2020 marks the 100th anniversary of the passage of the 19th Amendment, guaranteeing and protecting women's constitutional right to vote. This historic centennial offers an unparalleled opportunity to commemorate a milestone of democracy and to explore its relevance to the issues of equal rights today. The planning of the project began with a roundtable discussion between Dr. Catrena Lisse, Director of the Science Education Center and chemistry professor, Dr. Laura Whitlock, astronomy lecturer, Ruth Eilers, Director of Academic Outreach and environmental science lecturer, Dr. Sharon Careccia, physics lecturer, and Dr. Rob Sumowski, Special Education faculty and an avid collector of space memorabilia. *cont. next page*

GC Journeys Virtual Info Sessions

Want to know more about GC Journeys? This 30-minute information session, led by Drs. Cynthia Alby and Jordan Cofer, will offer an overview of the GC Journeys program, discuss Transformative Experiences and Essential Skills, and answer any questions you might have.

One more virtual GC Journeys Info Sessions is scheduled for 2020: the final session for this year will be held on November 18, 3:00 p.m.

Register for the virtual Info Session here!

Dr. Sumowski enjoyed assembling the section of the project dealing with the vast contributions of women in aviation and space exploration. He gathered and contributed books by early aviators and signed photographs from pioneer women astronauts like Sally Ride and Eileen Collins. One fascinating item he has loaned from his collection is a framed swatch of fabric from the wing of Amelia Earhart's Lockheed Electra.

While this project is still in the planning phase, due to a COVID-19 delay - like many other programs worldwide - the planning committee hopes to launch the program in Spring 2021. Preliminary plans for the program include:

1. A "walk through history"-style exhibit with pictures and memorabilia of some of the key women in STEM (Location TBA).
2. A hands-on experimentation exhibit for school-aged students.
3. A guest speaker and panel Q&A from women scientists in our area.
4. A video series highlighting some of the women in STEM, narrated by Georgia College faculty and students.

What are your goals for the students involved in the Women in STEM project?

Dr. Lisse states that the Women in STEM's primary goal is to bring public awareness to some of the untold stories of women in STEM throughout history, like Maria Mitchell, an astronomer who was a force behind women's rights and education in the nineteenth century. Dr. Sumowski shared that men have written much of what is considered history, often unjustly ignoring or leaving out altogether the vital contributions of pioneer women scientists. He hopes that in some small way, Women in STEM will shine a light on these all to often overlooked women whose work shaped a great deal of the world we know today. To this end, Dr. Whitlock spent time over the summer researching and gathering biographies for many of the women to highlight in the project.

Women in STEM also aims to raise awareness that girls and women are just as capable of pursuing STEM careers and being successful in STEM. The planning committee hopes to promote public awareness to parents and local K-12 educators about how they can encourage girls as much as boys in math and science by supporting learning opportunities and offering positive messages to children about their abilities. Through the community-wide project, the committee plans to emphasize strong and visible role models of women in math and science fields by recruiting some of the "GC Women in STEM" faculty and students and partnering with the GCSU Women in STEM faculty organization led by Dr. Stephanie Jett.

How do you increase student confidence in class when they are unfamiliar with the subjects being taught?

Relatability is key, says Dr. Lisse. Instructors must find a way to connect the student with the material, especially in STEM fields. Research suggests if an individual's ability to process oral, written, and graphical information is lacking, their confidence, attitudes, and behaviors towards science and health-related issues are directly and negatively impacted. In today's COVID-19 world, separating science from pseudoscience is critical for our society. Using real-world, relatable examples in the classroom to capture the student's attention will provide a conduit to comprehend the world in which we live, and help students make sound personal and societal decisions about science and health-related issues.

How do you engage students on topics where stereotypical social reinforcement discourages academic interest?

As Georgia's designated Public Liberal Arts College, a highly selective institution that provides high-quality education, Georgia College aims to produce graduates who can contribute and participate in human and civil affairs with self-efficacy to be more productive, scientifically literate members of society. *cont. next page*

Keep Up with the Center for Teaching and Learning on Social Media!

We cannot do this by avoiding uncomfortable topics and stereotypical social issues. How many of our students stay current on women, especially women in STEM, making news? For example, how many of our students know that Drs. Emmanuelle Charpentier and Jennifer A. Doudna won the 2020 Nobel Prize in Chemistry for their work on CRISPR-Cas9, genome editing? According to UC Berkeley's News press release, Doudna and Charpentier are only the sixth and seventh women to receive the chemistry prize since 1901 when the first Nobel Prize in Chemistry was awarded. The million-dollar honor will be shared by Doudna and Charpentier, who are also the first women to win a Nobel Prize in the sciences together, which sends the message, Doudna said, that "women rock."

Throughout history and even today, many women think that, no matter what they do, society will never recognize their work as if they were men. Doudna and Charpentier winning this prize make a strong statement that women can do science and that great science is recognized and honored. Topics like this can lead to great discussions for students enrolled in any course - not just STEM courses.

News from the CTL

Peer Feedback on Teaching (PFoT) - Available Until October 30

The PFoT provides instructors with confidential, formative feedback on their teaching. The results of the peer observation will only be shared with the instructor. If an instructor chooses to include peer observation as part of their midterm feedback, one trained CTL reviewer will assess the first 25+ minutes of a class period using the Peer Review protocol. Prior to the assessment, the reviewer will meet with the instructor to discuss their goals for the class to be reviewed and go over the protocol.

For more details on Peer Feedback on Teaching (PFoT), please visit **Midterm Course Feedback**. To schedule an assessment, please contact **ctl@gcsu.edu**.

CTL Teaching Tip

7 Ways to Assess Students Online and Minimize Cheating

How do you make sure your students take online tests without cheating?

- Break up a high-stakes exam into weekly tests.
- Start and end each test with an honor statement.
- Ask students to explain their problem-solving process.
- Get to know each student's writing style in low- or no-stakes tasks.
- Assess learning in online discussion forums.
- Don't base grades solely on tests.
- Offer students options for demonstrating their knowledge.

Learn more!

Upcoming CTL Workshops

Using Classroom Assessment Techniques to Improve Critical Thinking - October 20, 2:00 p.m. Several class assessment techniques can be used to engaged your learners in the process of critically examining issues.

Community Building in a Digital Environment - October 23, 12 noon. Learn to create classroom environments that focus equally on the student, knowledge and assessment, and inclusion.

Tools of the Trade: Education Tech Tools for Engaging Students - October 26, 3:00 p.m. This webinar is part of our new effort, the Digital Teaching Toolkit.

Alternative Assessment Techniques - October 27, 3:00 p.m. Explore a variety of alternative approaches to assessing learning.

So Many Options - What Video Conferencing Platform Do I Choose? - October 28, 12 noon. A comparative analysis of different video conferencing platforms available at Georgia College.

You Can Love Student Assessment. Really. - October 28, 3:30 p.m. Explore a template that allows instructors to easily create engaging and authentic assessments.

Developing Student Critical Thinking through Higher-Order Questioning - October 30, 12 noon. Explore ways to create higher-order questions for learners.

Podcasting for Teaching: Creating a Podcast - November 10, 1:00 p.m. This webinar is part of our new effort, the Digital Teaching Toolkit.

Please use our **registration form** to register for any of these workshops! Registrants will be sent the link to attend the webinar. Recordings will be released.

News from the Library

Online Library Workshops for Fall 2020

Russell Library invites you to attend our library workshop listed below. If you have a suggestion for a workshop topic that is not listed below, please feel free to send your suggestions to **lamonica.sanford@gcsu.edu**. If you would like one-on-one assistance, please email **ask@gcsu.libanswers.com**.

Preserving Your Scholarship - October 20, 12 noon. Learn how to share and preserve your scholarship and creative works through academia.edu, ResearchGate, and the Knowledge Box, while also discussing the readership metrics available through the Library.

Building a Low to No Cost Reading List - October 22, 12 noon. Learn what consitutes an Open Educational Resource, how to apply for an Affordable Learning Georgia grant, and how to use library resources to create reading lists.

Everything You Need to Know about Course Reserves, ILL, and GIL Express - October 28, 12 noon. Plan ahead and learn how Course Reserves, ILL, and GIL Express can provide the resources you need for your course.

News from IT

Information Technology is now on Instagram! Follow us at **gc.it**.

October is Cybersecurity Awareness Month, so you will see several items on both Instagram and Front Page pertaining to information security. To continue to heighten security efforts, we will start enforcing DUO when accessing PAWS, effective Monday, November 2.

As a reminder, always be suspicious of emails and even texts that ask you to respond or take action on things that you are not expecting. A great example was the phishing test that came out of our Information Security office. You may recall receiving an email that supposedly came from Monica Starley, asking you to provide her with your cell phone number. Out of 1,201 emails sent:

- 237 (19.7%) submitted the email to GoSecure IDR - BEST RESPONSE!
- 237 (19.7%) called or emailed the Serve Help Desk - GOOD RESPONSE!
- 294 (24.4%) contacted Monica directly or replied to the phish email sender providing their phone number - NOT A GOOD RESPONSE!

Stay safe!

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Have Suggestions? Need Help?

Contact Us

Phone:
478-445-2520

Email:
ctl@gcsu.edu

Location:
Ina Dillard Russell Library, Room 375