



## BTC Institute Teacher Courses SUMMER 2022 SCHEDULE

***No course fees and stipends will be provided to successful applicants.***

### ***Biotechnology: The Basics***

***July 25-29, 2022; 9:00am-4:00pm, lunch provided.***

***Are you interested in incorporating biotechnology topics in your teaching? If your knowledge of biotechnology is limited or you want to brush up on basic biotechnology techniques, this is the course for you!***

This one-week laboratory-based course is designed to introduce teachers to the fundamentals of biotechnology. Topics include:

DNA structure and function	DNA extraction	micropipetting
gel electrophoresis	restriction enzyme digestion	polymerase chain reaction (PCR)
bacterial transformation	bioethics	biofuels & biomanufacturing
stem cells	careers and training in biotechnology	NASA & biotechnology

In addition, there will be opportunities to develop your laboratory preparatory skills and collaborate with other teachers to integrate biotechnology into your curriculum.

### ***Biotechnology: Beyond the Basics***

***July 11-15, 2022; 9:00am-4:00pm, lunch provided.***

***Have you mastered gel electrophoresis? Are you ready to take the next steps?***

This one-week laboratory-based course is designed for teachers to learn and practice advanced biotechnology techniques used in molecular biology. Topics include:

gene expression	protein purification	immunodetection
genetic identity testing	epigenetics	genomic editing (CRISPR/Cas9)
bioinformatics	DNA sequencing	NASA & biotechnology
biomanufacturing	careers and training in biotechnology	

**For both courses:** Enrollment is limited to 16 participants, who may be eligible to receive a \$500 stipend, see online registration form for details on how to apply. **The deadline for application is June 17, 2022.** Applications will be reviewed first come-first served and, if not all awards are made June 17<sup>th</sup> the application process will remain open. In order to receive a stipend, teachers must submit a 2-3 page summary report to the BTC Institute during Academic Year 2022-2023 that documents how selected course content was implemented with students and colleagues.

**GRADUATE EDUCATION CREDITS:** will be an optional choice for both courses, paid for by the participant.

**LOCATION:** BTC Institute, 5445 East Cheryl Parkway, Madison, WI. Discounted lodging available nearby.

**DETAILS & REGISTRATION:** Please visit <https://www.btc.org/> or contact Barbara Bielec, [barbara.bielec@btc.org](mailto:barbara.bielec@btc.org)

*"This was such a valuable week. I would recommend this workshop to any colleague interested in the topic."  
Biotechnology: The Basics 2021 course participant*