



Center for Teaching and Learning

PSI Physics - NJ Endorsement Program Begin Teaching Physics by September

Learn to Teach Physics

The nonprofit New Jersey Center for Teaching and Learning® (CTL) is an international leader in closing the gap between the number of STEM teachers needed and the teaching supply. CTL's Progressive Science Initiative® (PSI®) Physics - New Jersey Endorsement program takes New Jersey teachers already certified in another content area and turns them into certified physics teachers. Coursework begins in July and teachers start teaching PSI Physics in their own classrooms in September, filling a critical need for many schools. More than 100 teachers from 17 districts have already completed this program since 2009.

What is PSI?

PSI is a highly successful approach built by teachers for teachers that has been shown to drive major gains in student achievement in math and science. Physics provides the foundation for chemistry and, together with chemistry, the foundation for biology. Additionally, it provides an essential, mutually reinforcing learning experience for students studying Algebra I. It represents the keystone in achieving the goal of Physics for All, a requirement of social justice for students and international competitiveness for our country. Learn more at www.njctl.org.

PSI relies on technology to allow teams of teachers to create, share, and improve courses. Those courses are designed to be delivered to the classroom by use of an interactive whiteboard and student responders. Materials can also be delivered to personal electronic devices, or printed for off-campus use. Courseware contains instructional presentations, homework, labs, and assessments, removing the stress and complexity of preparing lesson plans in isolation and making learning more fun.

The pedagogical methods used interweave direct instruction and social constructivism guided by the use of frequent, real-time formative assessment. All PSI curriculum materials are open-source and available at www.njctl.org. These materials are free to any teacher, school or district.

Who is this Program For?

This program is designed to train talented New Jersey teachers to become talented physics teachers. It is not necessary to be a math or science teacher to succeed in this course.

How does the PSI Physics Endorsement work?

Teachers learn using the same course materials and teaching strategies used with students: teachers learn from the same presentations; do the same homework and labs; are taught using direct instruction and social constructivism; use student response technology; and are given frequent formative assessments. This approach teaches both the content and the methods teachers will use to deliver that content to students.

Summer coursework teaches PSI Algebra-Based Physics. After successfully completing PSI Algebra-Based Physics, teachers continue taking Advanced Placement Physics during the academic year while also teaching a minimum of one section of PSI Algebra-Based Physics in their own schools, which is permitted by NJ DOE, and required for certification. Teachers gain their certification after successfully completing all coursework, and passing the General Science and Physics Praxis II exams.

Choose a Schedule and a Method that Works for You

Coursework this summer will follow CTL's blended learning course structure which combines face-to-face instruction with virtual learning, creating flexibility for those enrolled. All teachers will attend class 15 hours per week for five weeks. In class, teachers will study via the same methods, content, and technology they will later use in their own classrooms. By learning as they will teach, teachers become confident and competent masters of algebra-based physics instruction.

In addition, each teacher may choose to participate in any or all of these options:

- Attending up to 30 hours of face-to-face Instructional Meetings convened as 3.5- hour sessions immediately before or after the first and last class each week;
- Utilizing up to 40 hours of supplemental virtual learning materials including video presentations, problems, and solutions; and/or
- Participating in video conferencing with fellow teachers and instructors up to five nights per week, to work together on common problems or to seek help.

These options are provided so that each teacher can use the instructional resources best suited to their situation and learning style. Regardless of their learning path, grades are based on regular, weekly testing offered during the required attendance period. Teachers wishing to improve their scores have the option of retesting as many times as they wish during Instructional Meetings.

To see what course graduates have to say about their teaching and learning experience, go to njctl.org/physicsteachers.

Schedules and Locations

Coursework this summer is offered on three continuous days per week, with half days of instruction on days one and three and a full day in between. This schedule makes half days before and after class available for optional Instructional Meetings and reduces the number of days teachers traveling to attend must be away from home. Optional on-line videos are available 24-7. Video conferencing with an instructor and fellow teachers is available five nights per week during the course.

The summer schedule and available locations are posted here: <https://njctl.org/nj-science-certification/teaching-endorsement/how-to-get-started/>

Beginning in late August or early September, classes will resume one night a week and about every third Saturday.

What is the Cost?

\$6,360 for the entire program (only \$900 for the summer)

Tuition fees are low because of the support of generous sponsorship.

For more information on when payments are due, view the [tuition schedule on njctl.org](#).

Inquiries and Enrollment

To learn more about additional professional development, graduate credit or continuing education considerations, email courses@njctl.org.

Applicants seeking to enroll in the New Jersey Physics Endorsement program should go to njctl.org/teaching-endorsement/application.

State and District Inquiries

CTL works hard to customize its training programs to meet specific professional development needs. Contact CTL to learn how easy it is to bring trainers to your area, or to work with CTL to shape custom training options.