



NEW JERSEY CENTER
FOR TEACHING & LEARNING

Computer Science Teacher Education Program



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The New Jersey Center for Teaching and Learning (NJCTL) offers online, asynchronous, learner-scheduled courses which prepare teachers of any subject area, to teach AP Computer Science A (AP CS A). These courses require no prior CS experience and include:

- Teaching methods
- AP CS A content and how to teach it
- Coached field experience to support first year AP CS A teachers

These courses can be taken anytime, anywhere...at your own pace.

NJCTL is a nonprofit charitable organization founded by New Jersey Education Association that provides simple, scalable solutions for the global STEM crisis.

NJEA members receive a 20% reduction in tuition.

Contact us at info@njctl.org

NJCTL—The Leader in STEM Education



Learn
online:
anytime,
anywhere



Reduce
stress for
you and your
students



Reduce district
costs by
eliminating
textbooks

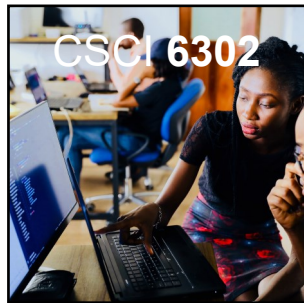
COMPUTER SCIENCE COURSES



TEACHING METHODS FOR COMPUTER SCIENCE

Credits: 2

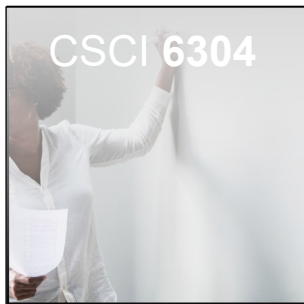
Teachers will learn how to use research-proven approaches to create a highly effective and welcoming learning environment for their students of Computer Science. Pedagogy topics include social constructivism; metacognition; differentiation; and meeting the needs of English language learners. Policy topics include grading based on mastery; why homework should not be graded; and providing retests to encourage continuous improvement.



COMPUTER SCIENCE FIELD EXPERIENCE I

Credits: 3

This is the first of two field experience courses in which candidates teach at least one section of Computer Science to students. Learners will develop a deeper understanding of PSI and teaching methods. Content topics will be drawn from prerequisite coursework.



COMPUTER SCIENCE FIELD EXPERIENCE II

Credits: 3

This is the second of two field experience courses in which candidates teach at least one section of Computer Science to students. Learners will continue to deepen their understanding of PSI and teaching methods. Content topics will be drawn from prerequisite coursework.



LEARNING AND TEACHING ADVANCED COMPUTER SCIENCE I

Credits: 5

This course is for teachers to learn the content of *PSI Advanced Placement Computer Science A* and how to teach that course to students. It focuses on fundamental programming skills and thought processes required for successful programming in any language while integrating components of Java. Topics include Fundamentals of Programming; Control Statements & Loops; Methods & Arrays; and Strings.



LEARNING AND TEACHING ADVANCED COMPUTER SCIENCE II

Credits: 5

This course is for teachers to learn the content of *PSI Advanced Placement Computer Science A* and how to teach that course to students. It focuses on object-oriented programming skills and thought processes required for successful programming in any language while integrating components of Java. Topics include Classes, Array Lists, Inheritance & Polymorphism, Recursion, and Searching & Sorting.



Computer Science Teacher Education Program

	Course #	Course Title	Credits	Tuition
Phase I: Prior to Fall Semester	CSCI 6101	Teaching Methods for Computer Science	2	\$400
	CSCI 6313	Learning and Teaching Advanced Computer Science I	5	\$750
Phase II: Fall Semester	CSCI 6302	Computer Science Field Experience I	3	\$825
	CSCI 6315	Learning and Teaching Advanced Computer Science II	5	\$750
Phase III: Spring Semester	CSCI 6304	Computer Science Field Experience II	3	\$825
			18	\$3550



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