

## PROJECT LEAD THE WAY INSTRUCTOR—COMPUTER SCIENCE

POSITION: Project Lead the Way Teacher Computer Science Instructor – West Plains Middle School & West Plains High School

JOB TITLE: High School Project Lead the Way & Middle School Gateway Computer Science Teacher

Position Summary: The candidate will provide classroom instruction for Project Lead the Way (PLTW) Computer Science (CS) curriculum. PLTW is a Science, Technology, Engineering, and Mathematics (STEM) program that exposes students to hands-on activities, projects, and problem-based learning that have real world application. PLTW is a national nonprofit organization that partners with elementary, middle, and high schools to implement curriculum that promotes math and science achievement. This unique position is innovative and requires creativity, commitment to STEM education, and an overall passion for project, problem-based learning that has real world application. PLTW offers a K-12 computer science pathway, which ignites student interest early and strengthens it over time through engaging, problem-based learning. Preference will be given to applicants with a computer science degree. Knowledge of programming or work experience will be considered. A four year degree is required for the position and a willingness to become certified in the national PLTW curriculum. Student centered instructors certified in one of the following areas (Math, Science, Physics, and Industrial Technologies) OR persons with a four year degree Computer Science are encouraged to apply for this position. The successful candidate will become a PLTW instructor teaching the nationally certified STEM curriculum. The new position will serve West Plains Middle School and West Plains High School in the West Plains Public School System. The successful candidate will train at Missouri S & T in Rolla during June and/or July in order to become certified to teach selected courses. This is an exciting opportunity to enhance your career by becoming a PLTW instructor!

### Physical Demands (Strength)

- Exerts 20 to 50 pounds of force occasionally, and/or
- Exerts 10 to 25 pounds of force frequently, and/or
- Exerts 10 to 20 pounds constantly.

## Job Description

Position Title: Project Lead the Way Computer Science Teacher– West Plains Middle School & West Plains High School  
Reports To: Building Principals  
Department: STEM/PLTW  
Last Revised: 01/2016

### **PRIMARY DUTY**

To provide classroom instruction for Project Lead the Way (PLTW) Computer Science (CS) Courses. Provides innovative and creative, commitment to STEM education, and an overall passion for project, problem-based learning with real world application. Ensures all students acquire the course level objectives set forth in the National PLTW Curriculum.

**ESSENTIAL JOB FUNCTIONS** include the following. Other duties may be assigned. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Train at Missouri S & T in Rolla during June and/or July in order to become certified to teach selected courses
- Prepares course objectives and outlines for course of study following curriculum guidelines and requirements of PLTW, State, and school.
- Assigns lessons, corrects homework and provides students with positive feedback and constructive criticism on assignments.
- Administers tests to evaluate student's progress, record results, and issues reports or conducts meetings to inform parents of progress.
- Establishes and enforces rules for behavior and procedures for maintaining order among the students for whom they are responsible.
- Maintains discipline in classroom.
- Keeps attendance records.
- Recognizes and refers students encountering medical, physical and/or psychological problems to District specialists as required.
- Establishes and maintains appropriate working relationships by actively communicating with the parents.
- May be assigned to teach any of the PLTW Computer Science Curriculum, including but not limited to:

#### **MS Gateway**

Introduction to Computer Science 1

Introduction to Computer Science 2

#### **HS Computer Science**

Introduction to Computer Science (ICS, 0.5 year)

Computer Science and Software Engineering (CSE, 1 year)

Computer Science Applications (CSA, 1 year)

Cybersecurity (SEC, 0.5 year)

Computational Problem Solving (CPS, 1 year)

*Note: A full description of each course is available upon request.*

**SECONDARY JOB FUNCTIONS** including the following. Other Duties may be assigned. Reasonable accommodations may be made to enable individuals with disabilities to perform the secondary job functions.

- Participates in faculty and professional meetings, educational conferences, mentor program and teacher training workshops.
- Attends staff meetings and serves on staff committees as required.
- Maintains a physically and aesthetically attractive classroom setting and exercises proper care of district equipment.
- Performs additional tasks and assumes such other responsibilities as assigned by the Principal.

**EDUCATION and EXPERIENCE** an equivalent combination of education, training and experience will be considered.

- A four year degree in one of the following areas: Computer Science, Math, Science, Physics, Industrial Technologies OR a four year degree in a field of Computer Programming.
- The successful candidate will become a PLTW Computer Science instructor teaching the nationally certified STEM curriculum.

**KNOWLEDGE, SKILLS and ABILITIES** which may be representative but not all inclusive of those commonly associated with this position.

- Language Ability: Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of students.
- Math Ability: Basic math skills required.
- Reasoning Ability: Ability to apply common sense understanding to carry out instructions furnished in written or oral form. Ability to deal with problems involving several concrete variables in standardized situations.
- Computer and Equipment Skills: To perform this job successfully, an individual should have knowledge and experience with Word Processing software; Spreadsheet software; CAD and Development software as required through PLTW. Additionally individuals will utilize standard office equipment including photocopiers and telephone systems.
- Personnel Management: Skilled at developing, motivating, and directing people as they work.

**COMPETENCIES** to perform the job successfully, an individual should demonstrate the following competencies:

- Interpersonal - Focuses on solving conflict; maintains confidentiality; remains open to others' ideas and viewpoints.
- Oral Communication - Speaks clearly and persuasively in positive or negative situations; listens and gets clarification; responds well to questions.
- Development - Assesses own strengths and weaknesses; strives to continuously build knowledge and skills; shares expertise with others.
- Written Communication - Writes clearly and informatively; able to read and interpret written information.

- Leadership - Inspires and motivates others to perform well; effectively influences actions and opinions of others; Inspires respect and trust; accepts feedback from others; provides vision and inspiration to students and peers; gives appropriate recognition to others.
- Ethics - Treats people with respect; works with integrity and ethically; upholds school district values.
- Adaptability - Adapts to changes in the work environment; changes approach or teaching method to best fit the situation.
- Attendance/Punctuality - Is consistently at work and on time.
- Judgment - Exhibits sound and accurate judgment; supports and explains reasoning for decisions.
- Mental toughness – Maintains composure, keeps emotions in check, controls anger, and avoids aggressive behavior, even in difficult and stressful situations.

**WORK ENVIRONMENT** environmental or atmospheric conditions commonly associated with the performance of the functions of this job.

- May be regularly exposed to varying inclement outdoor weather conditions while on recess duty or bus duty.
- This individual may be exposed to potentially hazardous bodily fluids.

**PHYSICAL ABILITIES** commonly associated with the performance of the functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- The employee regularly:
  - Exerts 20 to 50 pounds of force occasionally, and/or
  - Exerts 10 to 25 pounds of force frequently, and/or
  - Exerts 10 to 20 pounds constantly.
- Specific vision abilities required by this job include close vision, distance vision, peripheral vision, depth perception and ability to adjust focus. While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel; reach with hands and arms and talk or hear. The employee is frequently required to stand; walk; sit and stoop, kneel, crouch, or crawl. The employee is occasionally required to climb or balance.