



Cranbrook Institute Of Science

Education Department

Position Description

Job Title: Museum Educator/ Physics Coordinator
Department: Education
Reports To: Head of Visitor Experience
FLSA Status: Exempt
Prepared By: Nancy Swords
Prepared Date: August 20, 2007
Approved By: Ruth Manz
Approved Date: August 21, 2007

SUMMARY: The Museum Educator/Physics Coordinator is responsible for developing and facilitating all aspects of Physics programming as well as material upkeep and acquisition for current and future programs. This position assists with supervising and program facilitation of all summer camp activities, and also assists with the coordination of summer teacher training sessions. Will also be responsible for demonstrated knowledge of current trends in teaching, state required benchmarks and state testing. Will be responsible for developing new CIS-specific methods that encourage the development of teaching skills for volunteer staff, part time staff and for the recruitment and oversight of volunteers.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Develop and deliver educational programs related to assigned area of science expertise for the Education Department.
- Maintain all equipment related to programming in area of expertise.
- Train all part-time staff as well as volunteers in facilitation of programs.
- Coordinate all summer camp activities, including development of pre-camp training for all staff as well as assisting with hiring of required camp staff.
- Assist the Head of Visitor Experience to coordinate summer teacher training sessions. This will include working with state Intermediate School Districts district science coordinators, school administrators and college education programs to determine content and pedagogical needs of current and new teachers.
- Attend meetings/facilitate lectures/ teacher training sessions aligned with science area of expertise.
- Recruit and support the volunteers.
- Data collection and all reports related to the program.
- Responsible for the program budget and oversees the inventory and procurement of all materials used in the program.

- Assist schedulers to fill registrations for the program.
- Communicate with schedulers and visiting teachers for all pre-planning of programs.
- Develop an ongoing dialog with professional/consulting contracted staff for continued development of programs.
- Prepare classrooms creating an inviting atmosphere in which to teach/learn.
- Work as part of the Education Department team.
- Represent the Education Department at professional meetings and teacher's in-service and/or training conferences related to the position.
- Able to teach all classes for the program.
- Develop concepts for teacher training sessions as well as coordinate and facilitate training sessions.
- Present other programs, including, but not limited to, homeschool, special events, holiday events, outreach (programs and events) and camp as needed.
- Maintain attendance, punctuality and performance standards set forth in Cranbrook's employee handbook.
- Other duties as assigned.

SUPERVISORY RESPONSIBILITIES: Supervises program facilitation by part time staff and CIS volunteers.

The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

KNOWLEDGE AND EXPERIENCE:

- In-depth knowledge of physics.
- A minimum of 3 years experience developing curriculum for and teaching a variety of ages, either formal or informal.
- Undergraduate degree in science required (undergraduate degree in teaching with physics certification preferred).
- Demonstrated knowledge of current trends in teaching and state required benchmarking and testing.
- Strong communication and organizational skills.
- Willing to try new ideas to keep up with current developments in teacher education.
- Enthusiasm for the subject and an eagerness to share that enthusiasm with learners of all ages.
- Proficiency in Word, Excel and PowerPoint required.
- A valid Michigan driver's license with a satisfactory driving record is required.

COMMUNICATION SKILLS: Ability to effectively present information and respond to questions from groups of visitors. This position will communicate with constituents both inside and outside of Cranbrook including teachers, administrators, program participants and the general public. Ability to hear, see, speak and understand English.

INDEPENDENT JUDGEMENT/PROBLEM SOLVING:

- Problems this position will encounter are both routine and non-routine, with solutions coming from following established policy and practices, and also applying applicable principles and theories of educational program development and delivery.
- Ability to apply common sense understanding to carry out instructions furnished in written, oral or diagram form.
- Able to work safely with materials, provide age appropriate programs and programs based on the visitor's responses.
- Able to develop and construct demonstrations and materials as needed.
- Able to quickly and professionally problem-solve issues with daily routines of incoming students.

WORK COMPLEXITY:

- Programs are designed for elementary and middle school grades. The ability to adjust the programs to fit a variety of audience needs is required.
- Ability to address problems and coordinate projects from start to finish.
- Train and evaluate programs and volunteer teachers.
- Train and supervise part-time staff.
- Ability to motivate others.

CREATIVITY/INNOVATION:

- Required to develop ways of using materials and equipment that will enable visitors to learn.
- Able to develop new components for programs.
- Required to develop new lesson plans coinciding with state-required benchmarks. Ability to assess needs for improvement and develop plans for the implementation of those improvements.
- Motivate volunteers.

PHYSICAL DEMANDS: The physical demands are representative of those that must be met by an employee to successfully perform the essential functions of this job such as the ability to hear, see, speak and understand English, use a computer, ability to speak clearly to be understood in presentations. Some lifting, moving and carrying of materials is a routine part of the position (lifting and moving up to 50 pounds). Traveling to off-site presentations is also a part of this position.

WORK ENVIRONMENT: This position operates in an office/museum environment and on the nature trails of CEC campus, with exposure to crowds, noise, chemicals, and, on occasion, off-site at schools, universities and other venues.