#### INSTRUCTOR/TRAINER (INFORMATION TECHNOLOGY) (Competency-Based)

## APPENDIX A

#### O\*NET CODE 25-1194

Competency/performance-based apprenticeship occupations are premised on attainment of demonstrated, observable and measurable competencies in lieu of meeting time-based work experience and on-the-job learning requirements. In competency/performance-based occupations apprentices may accelerate the rate of competency achievement or take additional time beyond the approximate time of completion.

This training outline is a minimum standard for Work Processes and Related Instruction. Changes in technology and regulations may result in the need for additional on-the-job or classroom training.

## WORK PROCESSES

#### A. Student Orientation

- 1. Meet new students who are joining class.
- 2. Describe and/or show both physical and virtual layout of classroom and related facilities to student(s).
- 3. Describe and/or demonstrate learning materials such as books, workbooks, file folders, encompassing both digital and printed materials.
- 4. Provide basic introductory instruction in subject matter of class(es).

#### **B.** Student Instruction

- 1. Instruct and assist individual students, in one or more subject areas.
- 2. Switch from subject to subject as needs dictate.
- Employ various teaching methods, such as: defining words, explaining concepts, giving examples, asking questions to prompt students, repeating or clarifying instructions.
- 4. Answer student(s') questions.
- 5. Advise students whether answers or performances are satisfactory or not.
- 6. Provide positive feedback about student(s') abilities and performance.
- 7. Provide one-on-one remedial tutoring.

- 8. Select and assign additional learning activities if initial assignments are completed early. Provide real-world examples of content or competencies being taught.
- Provide real-time(live) instruction, through desk-top sharing and classroom engagement.

# C. Specialized Skill Area(s) Instruction (Optional)\*

- 1. Demonstrate skills such as coding, math, technology skills, digital citizenship skills, art, music, drama, and storytelling.
- 2. Explain necessary material and sequence of steps for performance of skill.
- 3. Direct students' attempts at performance; correct as necessary.

# D. Student Observation and Progress Reports

- 1. Observe progress of individual students as they work on assignments.
- 2. Report on student progress, either orally or in writing (if applicable).
- Keep written records of activities completed and/or mastered by students.
- Evaluate students' progress and recommend advancement to more complex work. Record student attendance.

## E. Test Administration

- 1. Administer informal tests and exercises.
- 2. Score-tests and exercises.
- 3. Prepare original test material
- 4. Review and discuss results of tests and exercises with individual students.

## F. Classroom Maintenance

- 1. Maintain awareness of whereabouts of each student.
- Check on students missing from classroom.
- 3. Demonstrate professional behavior during class instruction.
- 4. Observe any conflicts which may occur and resolve where appropriate.

## G. Learning Aids

- 1. Set up and operate online learning platforms, utilizing collaborative software tools, technology resources such as video cameras, digital whiteboards, sharing desktops, smartboards, audio-visual aids as required for instruction.
- 2. Set up and operate additional technology devices such as digital cameras, digital whiteboards, smartboards, STEAM technology tools, camcorder, tripod, sound system (if available).
- 3. Operate personal computers and printers, wherever appropriate as a learning aid.
- 4. Refer students, as appropriate, to resource materials such as digital whiteboards, web-based tools, dictionary, calendar, library.
- 5. Use traditional learning aids such as digital whiteboards, web-based tools, chalk, and blackboard.

#### H. Materials Distribution

- 1. Hand out materials such as digital materials, paper, workbooks, dictionaries to students, as appropriate.
- 2. Gather up both digital and printed materials when students have finished with them.

#### Approximate Total Hours 1000-2000

Apprentices in Competency-Based Programs shall participate in no fewer than 1,000 documented hours of on-the-job training, and until they have demonstrated a competency for each Work Process, with the understanding competency will be demonstrated reasonably proximate to the maximum on-the-job training hours. Competency Assessment referenced in Appendix B.

Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to https://dol.nv.gov/public-work-and-prevailing-wage

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## APPENDIX B

#### **RELATED INSTRUCTION**

#### Safety and the Workplace

- 1. Basic Workplace Safety and Protocols
- 2. First Aid & CPR (minimum 6.5 hours) if Instructor is in a physical classroom
- 3. Sexual Harassment Prevention Training MUST comply with section 201-g of the Labor Law

#### Job Skills and Theory

- 1. Interpersonal Communication, including Emotional regulation, Unconscious Bias, Modern Communication Skills, Customer Engagement Skills
- 2. Presentation Skills
- Record Keeping
- 4. Report Writing
- 5. Educational Psychology
- Developmental Psychology
- 7. Teaching Methods: Classroom Management; Psychological Safety; Curriculum Design and Development; Teaching Online; Classroom Engagement; **Online Collaboration Tools**
- 8. Teaching Media
- 9. Cultural and Classroom Diversity
- 10. Conflict Resolution
- 11. Learning and Motivation
- 12. Computer Concepts including:
  - a. Full-Stack Applications and Technologies
  - b. Front-End
  - c. Applications and Technologies
  - d. Back-End Applications
  - e. Reading and Refactoring Code
  - f. Prototype Applications

- g. Computer Software Applications, such as: Microsoft Suite, GitHub, Git, Visual Studio (VS) Code, Software Development and Operations (DevOps)
- h. Foundations in Internet research

## Additional Topics as Necessary

#### **Competency Assessment**

- 1. Test Preparation
- 2. Written/Practical Proficiency Examination(s)

At least 144 hours of Related Instruction must be available for the apprentice at the time of his/her indenture. However, the apprentice may test out earlier if able to demonstrate competence for each topic on the Related Instruction outline.

Appendix B topics are approved by New York State Education Department