

# Electronic Job Task Analysis (EJTA)-Job Aid/Guidance

## Background

This manual is intended to provide guidance on Jefferson Lab's Electronic Job Task Analysis (EJTA) system.

The EJTA is designed to assist Lab Management in identifying the Knowledge, Skills, and Abilities (KSAs) essential for success in jobs and direction for the training department in developing and/or selecting training resources that augment or compliment KSAs as needed. This guidance document does not prescribe specific methods for conducting job task analyses. Rather, it provides guidance on key elements line management should consider when analyzing job tasks using the EJTA.

A **Job Task Analysis (JTA)** is defined as:

A formal, industry-accepted study, validated by a group of subject-matter experts (SME) that defines competencies in knowledge, skills, and abilities as the basis for education/training curricula. Similar activities are also referred as task analysis, practice analyses and role-demonstration.

- Tasks** are the individual functions, whether mental or physical, necessary to carry out an aspect of a specific job
- Knowledge, Skills, and Abilities (KSAs)** include the physical and mental capabilities that a practitioner must possess to perform a task competently, ethically and safely.

## The EJTA Process

Line management uses the EJTA to define the essential activities of jobs for which they are responsible and this is done for all their direct reports. The system requires an annual review of an employees EJTA but this process can occur at any time throughout the year if an employee's job scope changes.

**Note: JTA completion dates in RED have either not been done or expired and should be updated. Any in progress ... EJTA's will be kept for one day (as long as you leave your browser open).**

- Environment, Safety & Health (ESH)
  - Manager:
    - 11/11 Complete (100.0%)
    - 11/11 Current (100.0%)

This is a list of all filled positions in ESH. To complete and/or approve a JTA, click the "Review/Edit JTA" button corresponding to the person in the position.

Org Member	JLab Type	Supervisor	Completed	Completed By	Approved	Approved By	Review/Edit JTA
Boggs, Mary	SURA/CEBAF	Williams, Jennifer	11/26/2019 4:47:32 PM	Williams, Jennifer	11/26/2019 4:47:32 PM	Williams, Jennifer	Review/Edit JTA
Burton, Imani	SURA/CEBAF	Williams, Jennifer	12/2/2019 4:27:01 PM	Williams, Jennifer	12/2/2019 4:27:01 PM	Williams, Jennifer	Review/Edit JTA
Collins, Paul	SURA/CEBAF	Rainey, Bill	2/3/2020 10:42:56 AM	Rainey, Bill	2/3/2020 10:42:56 AM	Rainey, Bill	Review/Edit JTA
Conley, Scott	SURA/CEBAF	Rainey, Bill	2/3/2020 10:43:32 AM	Rainey, Bill	2/3/2020 10:43:32 AM	Rainey, Bill	Review/Edit JTA
Fitzgerald, Tim	SURA/CEBAF	Perry, George	3/9/2020 3:45:15 PM	Perry, George	3/9/2020 3:45:15 PM	Perry, George	Review/Edit JTA
Lewis, Brett	SURA/CEBAF	Conley, Scott	11/13/2019 7:55:56 AM	Conley, Scott	11/13/2019 7:55:56 AM	Conley, Scott	Review/Edit JTA
Manzlak, Bert	SURA/CEBAF	Perry, George	11/12/2019 2:38:38 PM	Perry, George	11/12/2019 2:38:38 PM	Perry, George	Review/Edit JTA
Menefee, Tina	SURA/CEBAF	Perry, George	11/12/2019 2:10:12 PM	Perry, George	11/12/2019 2:10:12 PM	Perry, George	Review/Edit JTA
Perry, George	SURA/CEBAF	Rainey, Bill	12/5/2019 5:05:46 PM	Rainey, Bill	12/5/2019 5:05:46 PM	Rainey, Bill	Review/Edit JTA
Rainey, Bill	SURA/CEBAF	Hoey, Steven	2/18/2020 1:44:29 PM	Tyndall, Tara	2/18/2020 1:44:29 PM	Tyndall, Tara	Review/Edit JTA
Williams, Jennifer	SURA/CEBAF	Rainey, Bill	2/18/2020 2:20:37 PM	Tyndall, Tara	2/18/2020 2:20:37 PM	Tyndall, Tara	Review/Edit JTA

make

To

changes, line management selects the appropriate organization and then clicks the **Review/Edit JTA** button for the individual they are updating.

Questions begin at a broad level (employee, user, contractor, et al) and expand to progressively more detail as questions are answered **yes**. Each affirmative answer adds a related coded “skill” requirement and may also open more specific questions. When line management has answered all the questions, he or she has completed the Job Task Analysis for that individual and can update the person’s Skill Requirements List (SRL) with the click of a button.

A JTA can be conducted for everyone with an active record in JList, including users and contractors. While some generic skill requirements are created when a new person is hired, depending on their status or organization, they do not appear in the EJTA database until they become active—generally on their start date. After activation, the Lab supervisor or Sponsor can review and update the SRL using the EJTA.

## Responsibilities

### The Role of Line Management

The responsibility for determining what tasks are essential for a given job rests with the home supervisor or manager who both maintains the job description and evaluates performance in the job. He or she is in the best position to break the job into its essential elements which can then be applied to performance expectations, position descriptions, or job postings. The various job elements may include professional certifications, a broad understanding of a given field, the ability to operate a specific system, written or verbal communication skills, as well as hazard mitigation or safety risk assessment and implications, etc.

These elements usually fall into one of four main categories: People Management, General Administrative Management, ES&H, and Technical/Functional. While most EJTA elements/tasks in the first three categories have been developed or approved by the Lab’s experts in the subject with which they are associated, the technical functions of a job must be identified by the operational chain and uploaded into the EJTA database through the Learning and Development Department which administers the EJTA.

### The Role of the Subject Matter Expert (SME)

Determining what it takes, in terms of knowledge, skills, and abilities to perform job elements/tasks is the responsibility of the SME. SMEs are, by definition, experts in their fields and are in the best position to determine what someone needs to know or be able to do to perform certain tasks. They determine what credentials, licenses, professional certifications, degrees, and system-specific skills are needed to perform the

tasks in their area of expertise. SMEs for ES&H tasks reside in the ESH&Q Division, SMEs for talent management skills such as leadership and diversity are in Human Resources; SMEs for budgeting skills are in the CFO organization, etc.

These tasks are constructed in terms of their expected outcomes, e.g. *Oxygen Deficiency Hazard Awareness*, *Understanding How to Conduct a Performance Appraisal*, *Ability to Troubleshoot and Repair a Box Power Supply*, *Knowing the Responsibilities of a SOTR*, or *Operating the Compton Polarimeter*. The Learning and Development Department assigns each an alphanumeric code and records them in the [LMS](#) under the generic term “skills.” These skills are available to be assigned (via the EJTA) as job requirements and tracked in individual employees’ [SRLs](#) (Skill Requirements Lists).

For example, if the SME for Electrical Safety creates the skill, *Understand the Common Hazards Associated with High Voltage Electrical Power*, (code SAF600) because a variety of jobs require employees to work with high voltage electricity, he/she must also contribute an EJTA question such as, “Does the individual in this job work with high voltage electricity?” The question is worded to elicit a yes or no response. If the answer is yes, the employee in question will be required to have this skill. The question appears in the EJTA questionnaire linked with skill SAF600.

### **The Role of the Learning and Development Department**

Besides managing the LMS and EJTA, the Learning and Development Department selects and/or creates training programs that effectively and efficiently meet Lab needs. These needs are identified using the JTA process.

When line management identifies the key tasks essential for a job under his/her control and the various SMEs identify what tools or credentials best prepare individuals to carry them out, it is up to the Learning and Development Department to either select courses or programs that will meet the need or create in-house programs to do it. In order for program developers to meet the need captured in a JTA, the JTA must be current and developed using generally accepted procedures. It should include all the key elements in the job, but for those elements/tasks that require training, the following must be included:

- a. An objective or scope that defines the outcome of the job/task, including conditions and criteria
- b. A list of the KSAs that are necessary
- c. A criticality rating for each KSA
- d. Criteria that can be used for validating the JTA

The chart below illustrates the relationship between components of a JTA and training program:



If the EJTA data--“skill” and question(s)--created by the SME include the above characteristics, the Learning and Development Department can use it to either identify an existing curriculum or create a lesson plan that will form the basis for a training program that imparts the desired KSA(s). This program is then entered in the LMS as a “course” and linked to the “skill” code it is designed to teach. Registering for and completing an individual offering (“class”) of the “course” will update a person’s LMS record and automatically make them current in the associated skill(s).

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### LMS - VIEW COURSE

<b>Name</b>	Confined Space Entry
<b>Display Name</b>	Confined Space Entry
<b>Description</b>	Overview of the dangers of confined spaces, control of their hazards, and the JLab permit-entry system.
<b>Default Activity Type</b>	Instructor-Led Training
<b>Default Delivery Method</b>	Instructor-Led Training On-Site
<b>Default Media Type</b>	In-Person
<b>Vendor</b>	ES&H
<b>JRT Required</b>	No
<b>Skills</b>	Safe Entry into Confined Spaces (SAF907)
<b>Course Owner(s)</b>	Jennifer Williams (jennifer) Imani Burton (iburton)
<b>Open Class(es)</b>	4/9/2020 9:00 am Confined Space Entry

## Using the JTA to Design Curriculum

The job task analysis is an essential step in determining the body of knowledge, skills, abilities resources and other attributes that define the work performed by job incumbents. It ensures content is current and relevant so the critical aspects of the job are integrated into the learning curriculum. The use of SMEs throughout the process is essential to provide accurate and current content for instructional designers. At the same time, regular EJTA reviews by line management identify areas that should be added, adjusted, or deleted to keep the process relevant. These changes, in turn, are used to develop or revise course objectives and learning outcomes so they align with the job/task requirements.