

SCIENCES LABORATORY

Broad Occupational Category - 53

DUTIES AND RESPONSIBILITIES

- *Develop and implement standard operating procedures and workflows.*
- *Perform chemical, biological, or physical analyses of samples.*
- *Evaluate new materials, products, or processes for technical feasibility.*
- *Approve or validate test results or technical recommendations.*
- *Operate, calibrate, and maintain laboratory and field equipment.*
- *Conduct quality control and compliance inspections.*
- *Analyze and interpret test results to determine compliance with standards.*
- *Train, mentor, and evaluate junior technicians and staff.*
- *Provide technical guidance and expertise to staff and stakeholders.*
- *Conduct presentations, training sessions, or workshops, including reports or documentation for management or regulatory agencies.*
- *Collaborate with cross-disciplinary teams internally and externally.*
- *Apply standard operating procedures in laboratory and field testing.*
- *Maintain and update laboratory and field data files, maintain records and databases.*
- *Schedule, assign, and coordinate work for teams or units.*
- *Oversee implementation of research or quality assurance programs.*

COMPETENCIES

- **Integrity and Trust** - Is widely trusted; is seen as a direct, truthful individual; can present the unvarnished truth in an appropriate and helpful manner; keeps confidences; admits mistakes; doesn't misrepresent him/herself for personal gain.
- **Organizing** - Can marshal resources (people, funding, material, support) to get things done; can orchestrate multiple activities at once to accomplish a goal; uses resources effectively and efficiently arranges information and files in a useful manner.
- **Functional/Technical Skills** - Has the functional and technical knowledge and skills to do the job at a high level of accomplishment.
- **Time Management** - Uses his/her time effectively and efficiently; values time; concentrates his/her efforts on the more important priorities; gets more done in less time than others; can attend to a broader range of activities.
- **Action Oriented** - Enjoys working hard; is action oriented and full of energy for the things he/she sees as challenging; not fearful of acting with a minimum of planning; seizes more opportunities than others.
- **Planning** - Accurately scopes out length and difficulty of tasks and projects; sets objectives and goals; breaks down work into the process steps; develops schedules and task/people assignments; anticipates and adjusts for problems and roadblocks; measures performance against goals; evaluates results.
- **Problem Solving** - Uses rigorous logic and methods to solve difficult problems with effective solutions; probes all fruitful sources for answers; can see hidden problems; is excellent at honest analysis; looks beyond the obvious and doesn't stop at the first answers.
- **Composure** - Is cool under pressure; does not become defensive or irritated when times are tough; is considered mature; can be counted on to hold things together during tough times; can handle stress; is not knocked off balance by the unexpected; doesn't show frustration when resisted or blocked; is a settling influence in a crisis.
- **Decision Quality** - Makes good decisions (without considering how much time it takes) based upon a mixture of analysis, wisdom, experience, and judgment; most of his/her solutions and suggestions turn out to be correct and accurate when judged over time; sought out by others for advice and solutions.

- **Ethics and Values** - Adheres to an appropriate (for the setting) and effective set of core values and beliefs during both good and bad times; acts in line with those values; rewards the right values and disapproves of others; practices what he/she preaches.
- **Process Management** - Good at figuring out the processes necessary to get things done; knows how to organize people and activities; understands how to separate and combine tasks into efficient work flow; knows what to measure and how to measure it; can see opportunities for synergy and integration where others can't; can simplify complex processes; gets more out of fewer resources.
- **Technical Learning** - Picks up on technical things quickly; can learn new skills and knowledge; is good at learning new industry, company, product, or technical knowledge; does well in technical courses and seminars.
- **Dealing With Ambiguity** - Can effectively cope with change; can shift gears comfortably; can decide and act without having the total picture; isn’t upset when things are up in the air; doesn’t have to finish things before moving on; can comfortably handle risk and uncertainty.
- **Customer Focus** - Is dedicated to meeting the expectations and requirements of internal and external customers; gets first-hand customer information and uses it for improvements in products and services; acts with customers in mind; establishes and maintains effective relationships with customers and gains their trust and respect.
- **Peer Relationships** - Can quickly find common ground and solve problems for the good of all; can represent his/her own interests and yet be fair to other groups; can solve problems with peers with a minimum of noise; is seen as a team player and is cooperative; easily gains trust and support of peers; encourages collaboration; can be candid with peers.

SMART Goal Prompting Questions

Develop and implement standard operating procedures and workflows

- What actions could you take to improve the development, consistency, or effectiveness of laboratory standard operating procedures and workflows?
- How will you measure success, such as fewer procedural errors, improved turnaround times, or increased consistency across staff?
- What review processes, workflow maps, templates, or quality-control tools could strengthen laboratory procedures?
- How do clear and effective procedures support laboratory quality, safety, compliance, and reliable results?
- By what date or review cycle will you aim to improve or implement the identified procedures?

Perform chemical, biological, or physical analyses of samples

- What steps could you take to improve the accuracy, efficiency, or consistency of sample analysis?
- How will you measure success, such as reduced errors, improved turnaround times, or increased accuracy and reliability of results?
- What analytical methods, equipment, training, or quality-control practices could strengthen your work?
- How does accurate sample analysis support public safety, regulatory compliance, and sound decision-making?
- By what date or testing cycle will you aim to improve your sample analysis practices?

Evaluate new materials, products, or processes for technical feasibility

- What actions could you take to strengthen the evaluation of new materials, products, or processes for technical feasibility?
- How will you measure success, such as improved evaluation accuracy, faster assessments, or better-informed recommendations?
- What testing methods, research, benchmarking, or technical criteria could support stronger feasibility evaluations?
- How does effective technical evaluation support innovation, safety, quality, and responsible resource decisions?
- By what date or evaluation cycle will you aim to improve your feasibility assessment practices?

Approve or validate test results or technical recommendations

- What strategies could you use to improve the accuracy, consistency, and defensibility of validating test results or technical recommendations?
- How will you measure success, such as fewer validation errors, improved documentation, or more consistent application of technical standards?
- What review checklists, peer-review processes, validation criteria, or quality-control measures could strengthen your work?
- How does reliable validation support confidence in laboratory results and agency decisions?
- By what date or review cycle will you aim to improve your validation practices?

Operate, calibrate, and maintain laboratory and field equipment

- What actions could you take to improve the operation, calibration, and maintenance of laboratory and field equipment?
- How will you measure success, such as fewer equipment failures, improved calibration compliance, or reduced downtime?
- What preventive maintenance schedules, calibration tracking tools, training, or equipment procedures could strengthen reliability?
- How does properly maintained and calibrated equipment support accurate, safe, and dependable testing?
- By what date or maintenance cycle will you aim to improve equipment management practices?

Conduct quality control and compliance inspections

- What steps could you take to strengthen quality-control and compliance inspections?
- How will you measure success, such as fewer deficiencies, improved inspection consistency, or faster resolution of identified issues?
- What inspection checklists, documentation standards, sampling methods, or corrective-action processes could improve quality control?
- How do effective inspections support laboratory reliability, regulatory compliance, and public confidence?
- By what date or inspection cycle will you aim to improve quality-control practices?

Analyze and interpret test results to determine compliance with standards

- What strategies could you use to improve the analysis and interpretation of test results against applicable standards?
- How will you measure success, such as fewer interpretation errors, more consistent determinations, or faster completion of compliance reviews?

- What reference materials, analytical tools, peer reviews, or decision criteria could strengthen your evaluations?
- How does accurate interpretation of test results support regulatory compliance and sound agency decisions?
- By what date or testing cycle will you aim to improve compliance evaluation practices?

Train, mentor, and evaluate junior technicians and staff

- What actions could you take to strengthen training, mentoring, and performance development for laboratory staff?
- How will you measure success, such as improved competency, fewer technical errors, greater independence, or successful completion of required training?
- What training plans, job aids, demonstrations, mentoring assignments, or feedback methods could support staff development?
- How does effective staff development contribute to laboratory quality, safety, continuity, and workforce succession?
- By what date or development cycle will you aim to improve staff training and mentoring practices?

Provide technical guidance and expertise to staff and stakeholders

- What steps could you take to improve the technical guidance and expertise you provide to staff and stakeholders?
- How will you measure success, such as faster resolution of technical questions, fewer errors, or increased stakeholder understanding?
- What technical resources, consultation practices, training materials, or knowledge-sharing methods could strengthen your support?
- How does effective technical guidance improve consistency, compliance, and confidence in laboratory decisions?
- By what date or professional development cycle will you aim to strengthen your technical guidance practices?

Conduct presentations, training sessions, or workshops, including reports or documentation for management or regulatory agencies

- What actions could you take to improve the clarity, effectiveness, and usefulness of laboratory presentations, training, workshops, and technical reports?
- How will you measure success, such as improved participant understanding, positive feedback, fewer follow-up questions, or more timely reporting?
- What presentation techniques, visual aids, templates, or audience-specific communication strategies could strengthen your work?

- How does effective communication of technical information support informed decisions, compliance, and public confidence?
- By what date or presentation/reporting cycle will you aim to improve your communication practices?

Collaborate with cross-disciplinary teams internally and externally

- What strategies could you use to improve collaboration with other laboratory disciplines, agency programs, external organizations, or technical partners?
- How will you measure success, such as fewer coordination issues, faster completion of projects, or improved team outcomes?
- What communication plans, coordination meetings, shared documentation, or project-management tools could strengthen collaboration?
- How does effective cross-disciplinary collaboration contribute to better analysis, problem-solving, and laboratory outcomes?
- By what date or project cycle will you aim to improve collaborative practices?

Apply standard operating procedures in laboratory and field testing

- What actions could you take to improve consistency and accuracy in applying standard operating procedures during laboratory and field testing?
- How will you measure success, such as fewer procedural deviations, reduced errors, or improved compliance with established methods?
- What training, checklists, observations, or quality-control processes could reinforce proper application of procedures?
- How does consistent application of procedures support reliable results, safety, and regulatory compliance?
- By what date or testing cycle will you aim to improve adherence to laboratory procedures?

Maintain and update laboratory and field data files, records, and databases

- What steps could you take to improve the accuracy, organization, accessibility, and timeliness of laboratory and field records?
- How will you measure success, such as fewer data errors, improved record retrieval, or more timely updates?
- What database tools, data-validation procedures, naming conventions, or documentation standards could strengthen records management?
- How do accurate records and data support traceability, quality assurance, regulatory compliance, and defensible results?
- By what date or reporting cycle will you aim to improve laboratory data and records management?

Schedule, assign, and coordinate work for teams or units

- What actions could you take to improve scheduling, work assignments, and workload coordination for laboratory teams?
- How will you measure success, such as improved workload balance, fewer missed deadlines, reduced bottlenecks, or increased productivity?
- What scheduling tools, workload-tracking methods, prioritization processes, or communication practices could strengthen coordination?
- How does effective work coordination support timely testing, quality results, and efficient use of staff and equipment?
- By what date or scheduling cycle will you aim to improve team workload management?

Oversee implementation of research or quality assurance programs

- What strategies could you use to improve the implementation and oversight of research or quality assurance programs?
- How will you measure success, such as completion of program milestones, improved quality indicators, or fewer identified deficiencies?
- What project plans, performance measures, review processes, or reporting tools could strengthen program oversight?
- How does effective oversight support reliable research, continuous improvement, regulatory compliance, and laboratory quality?
- By what date or program milestone will you aim to improve implementation and oversight practices?