

DACUM Research Chart for Forensic Scientist

DACUM Panel

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"Professional Competency Certification in Criminalistics"

Possible job titles for employees within this occupational area include but are not limited to:

- Forensic Scientist
- Criminalist

Duties and Tasks associated with this occupation may not be represented for every job title but should be inclusive of the occupation.

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DACUM Facilitators/Recorders

Marie Samples
ABC Exam Committee Chair

Elizabeth Ballard
ABC Exam Committee

DACUM Research Chart for Forensic Scientist

Duties		Tasks				
A	Perform Casework	A-1 Prepare workspace	A-2 Manage case assignments	A-3 Maintain Chain of Custody	A-4 Assess evidence	A-5 Conduct analyses
B	Participate in Quality Assurance/Quality Control Measures	B-1 Maintain controlled documents (e.g., forms, manuals)		B-2 Investigate non-conformities	B-3 Perform case file review	B-4 Maintain testimony records
C	Participate in Professional Development	C-1 Obtain continuing education credit(s)		C-2 Attend external training (e.g., workshops, webinars, seminars)		C-3 Attend internal training
D	Interact with the Judicial System	D-1 Provide expert testimony	D-2 Provide Discovery documents	D-3 Consult with attorneys	D-4 Provide expert opinion (e.g., non-testimonial)	D-5 Prepare for court
E	Provide Field Assistance	E-1 Provide external training	E-2 Distribute equipment/supplies	E-3 Calibrate field instruments	E-4 Consult with law enforcement agencies	
F	Administer Internal Training Program	F-1 Maintain training curriculum	F-2 Coordinate trainers	F-3 Assign training tasks	F-4 Present training lectures/demonstrations	F-5 Facilitate mock court
G	Perform Administrative Duties	G-1 Inventory supplies	G-2 Generate laboratory statistics (e.g., lab metrics, personal metrics)		G-3 Coordinate subpoenas	G-4 Update curriculum vitae/Statement of Qualifications/Resume
H	Interact with Community	H-1 Conduct facility tours	H-2 Prepare marketing materials	H-3 Meet with stakeholders	H-4 Support legislative bodies	H-5 Provide educational outreach

July 28-29, 2018

A-6 Generate case file documentation	A-7 Interpret analytical data	A-8 Prepare reports	A-9 Compare to individual characteristic database(s)			
B-5 Evaluate testimony	B-6 Perform validations	B-7 Analyze proficiency tests	B-8 Maintain instruments	B-9 Conduct verification checks (e.g., reagents, standards)	B-10 Determine Uncertainty of Measurement	
C-4 Conduct research project(s)	C-5 Read scientific literature	C-6 Publish scientific literature	C-7 Present at professional meeting(s)		C-8 Teach college courses	C-9 Maintain professional certification/licensure
D-6 Request testimony feedback						
E-5 Support field safety	E-6 Respond to scenes					
F-6 Evaluate trainee performance	F-7 Prepare training materials (e.g., samples, tests)					
G-5 Document daily activities	G-6 Plan travel	G-7 Attend internal meetings	G-8 Participate in performance evaluations	G-9 Respond to surveys	G-10 Process communications (e.g., email, phone calls)	G-11 Assist with Information Technology issues
H-6 Facilitate internships	H-7 Respond to interview requests	H-8 Support community projects				

July 28-29, 2018

Duties		Tasks			
A	Perform Casework				
B	Participate in Quality Control Measures	B-11 Conduct audits	B-12 Employ laboratory safety	B-13 Support Laboratory Security	
C	Participate in Professional Development	C-10 Maintain professional organization membership(s)	C-11 Perform peer review of literature	C-12 Audit forensic service providers	

Worker Behaviors (Attitudes/Traits)

- Unbiased
- Detail-oriented
- Adaptable
- Analytical
- Ethical
- Professional
- Intuitive
- Inquisitive
- Consistent
- Tactful
- Honest
- Decisive
- Supportive
- Dependable
- Respectful
- Open-minded
- Discreet
- Patient
- Reliable
- Teachable
- Observant
- Courteous
- Confident
- Relatable
- Efficient
- Creative
- Goal-oriented
- Safety-oriented
- Persistent
- Productive
- Assertive
- Team-player
- Punctual

General Knowledge and Skills

- History of Forensic Science
- Science Education/Degree
- Investigative
- Leadership
- Courtroom Etiquette
- Mathematics
- Statistics
- All Forensic Disciplines
- Trouble-shooting
- Problem-solving
- Time Management
- Computer
- Communication
- Photography
- Analytical
- Attention to Detail
- Basic Laboratory Safety
(e.g., use of personal protective equipment)
- Basic Laboratory Skills
(e.g., pipetting, using a balance, measuring)
- Organizational policies & Procedures
- Software Programs
- Lab Instrumentation
- Lab Equipment
- Reading Comprehension
- Writing
- Critical Thinking
- Multi-Tasking
- Public Speaking
- Organizational Skills
- Law
- Databases
- Accreditation Standards
- Codes of Ethics

Tools, Equipment, Supplies and Materials

General Laboratory Equipment
Computers
Office Supplies
Laboratory Information Management Systems
Personal Protective Equipment
Internet
Intranet
Reference Literature
Software
Laboratory Instrumentation
Vehicles
Phones
Camera
Reference Materials (e.g., standards, chemicals)
Secure Facility
Field equipment

Future Trends and Concerns

Novel Psychoactive Substances
Next-Generation Sequencing
Analytical Instrument Replacement
Laboratory Information Management Systems
Safety
Backlog Reduction
Lean Six Sigma
New Technology
Continued Training
Grants and Funding
Budgetary Issues
Legislative Changes
Paperless Processes/Digitization
Separation Between Law Enforcement and Forensics
Certification
Accreditation
Retention of Employees
Political Pressures
Succession Planning