

DLM Bootcamp: Essential Skills To Pass the ASCP Diplomate of Laboratory Management Exam - Session 9000

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Speaker Disclosure

In the past 12 months, I have not had a significant financial interest or other relationship with the manufacturer(s) of the product(s) or provider(s) of the service(s) that will be discussed in my presentation.

- The views and opinions expressed today are those of the presenter and do not reflect the official policy or position of the Department of the Air Force, Department of Defense, or the U.S. Government.
- I have not participated in the development of ASCP Board of Certification test questions.

- Introduction
- Housekeeping
- Overview of What We Will Cover

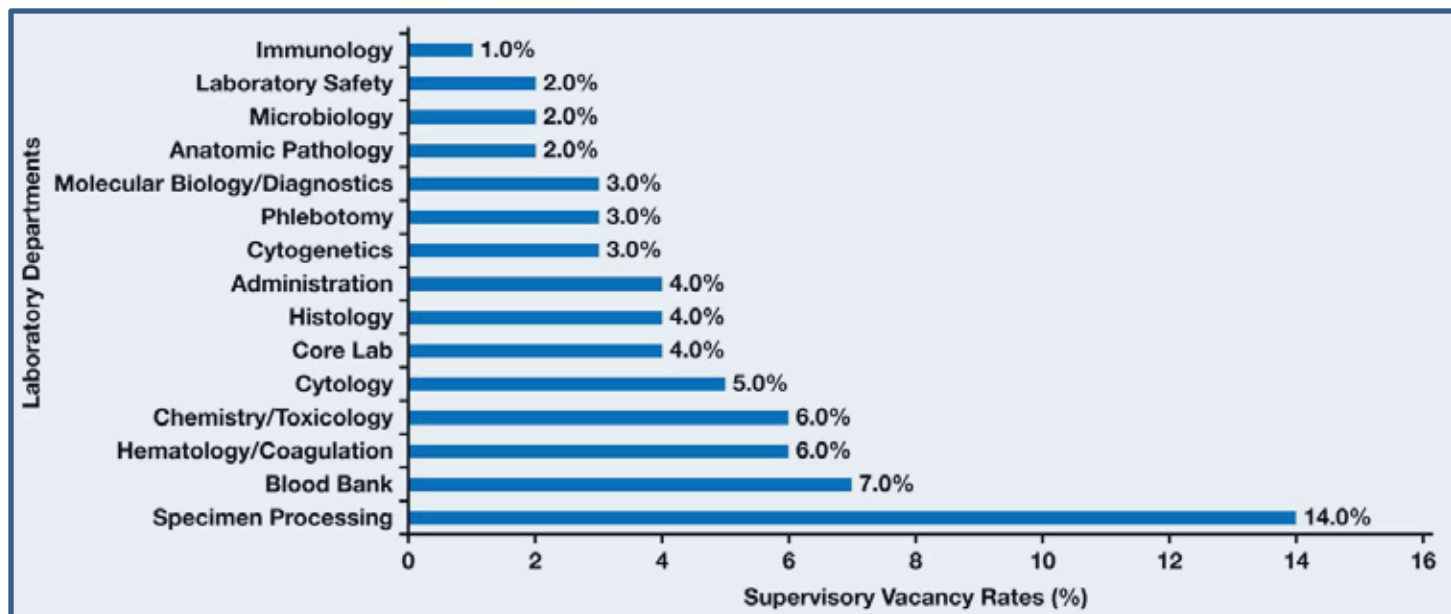
What is DLM Certification?

- Diplomate in Laboratory Management,
- DLM(ASCP)
- Demonstrates Excellence in Laboratory
- Management
- Application Fee: \$390
- 6 Different Routes
- <http://www.ascp.org/pdf/BOC-PDFs/procedures/Examination-Procedures.aspx>

Route	Degree	Certification - MLS	Years Experience Mgt Supervision
1	Master's degree -mgt related	No	2 in last 10 years
2	Master's degree	Yes	2 in last 10 years
3	BS	Yes	4 in last 10 years
4	Doctorate	No	2 in last 10 years
5	BS - Business	No	4 in last 10 years
6	BS	No	5 in last 10 years

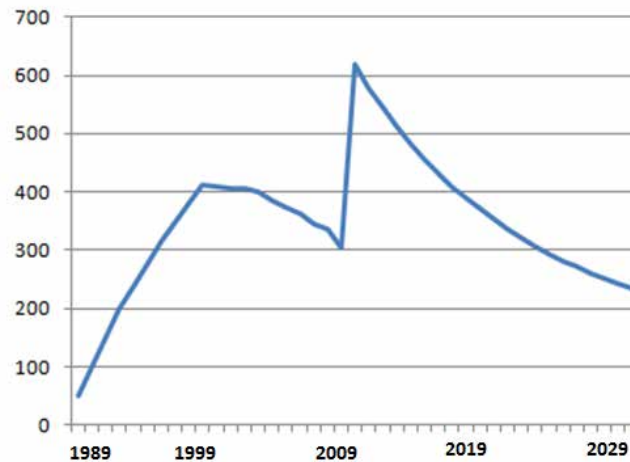
- Demonstrate Professionalism
- Advancement - Laboratory
- Increased Salary
- Advancement – Outside Laboratory
- Job Security
- Qualify for Licensure As Supervisor

ASCP 2012 Vacancy Survey

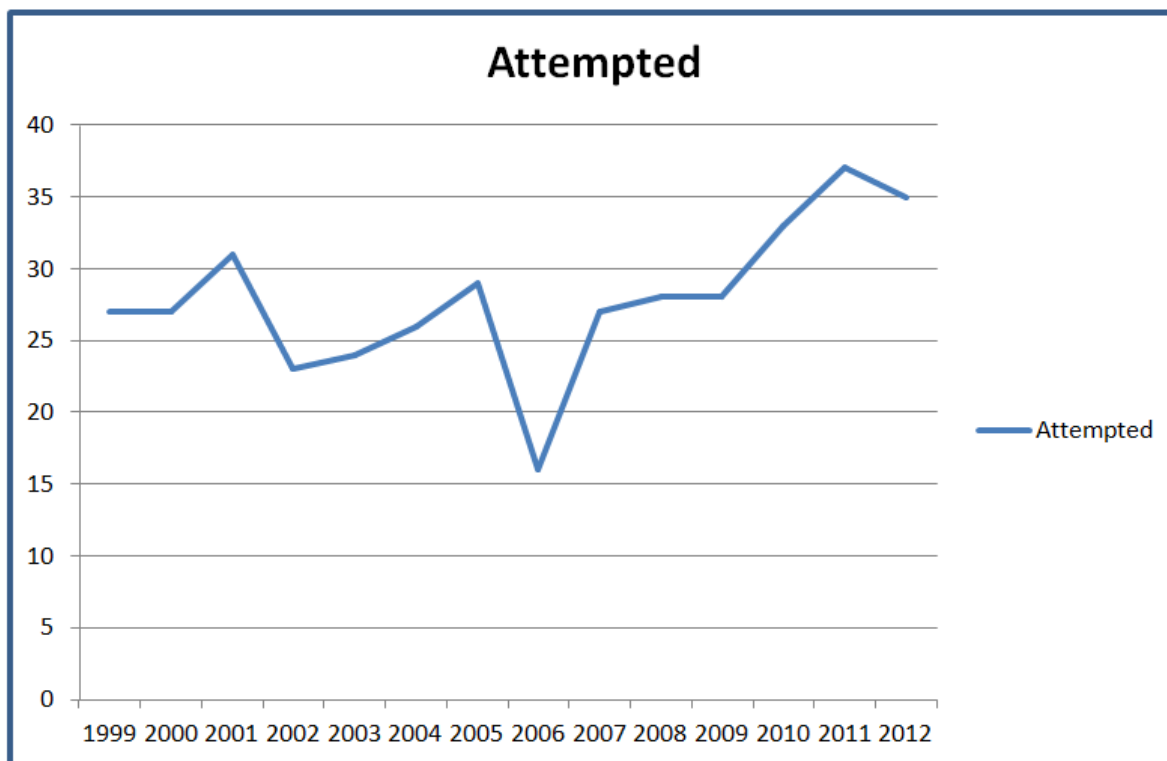


February 2013 issue of Lab Medicine

Estimated DLM Practicing



- Estimate that 7.5% of DLM will retire each year and 8 new DLM each year



- 2009 – 328 NCA credentialed became DLM(ASCP)
- 1989 – 1999: 509 (~51/year) attained DLM(ASCP)
- Jan 2013 – 973 Certified

In Last 10 Years, Must Have Experience In 20 of 32 areas (hint, this is a great checklist to show employers!)

Marketing Management (12%) - Consumer relations,
Managed care, Market research, Product development

Operations Management (29%) - Information
Technology, Facilities management, Data management,
Intra/Interdepartmental relations,
Licensure/accreditation, Performance improvement,
Productivity, Risk management/medical legal issues,
Safety

Personnel Management (26%)- Conflict resolution, Counseling/disciplinary action, Education and training/continuing education, Job descriptions, Motivation, Performance standards/evaluations, Personnel negotiations, Staffing/scheduling, Wage and salary administration

Financial Management (33%)

- Develops proposal/justifications/other documents
- Calculates productivity
- Calculates costs (direct/indirect)
- Calculates profit margins
- Calculates financial ratios
- Analyzes effectiveness and efficiency
- Analyzes reports
- Analyzes productivity
- Evaluates data, needs, and usage of resources
- Monitors direct/indirect cost and/or cash flow

Personnel Management (26%)

- Develops performance standards (formal/informal)
- Establishes relationships (internal/external)
- Evaluates personnel
- Evaluates problem situations
- Monitors staff behavior

Operations Management (29%)

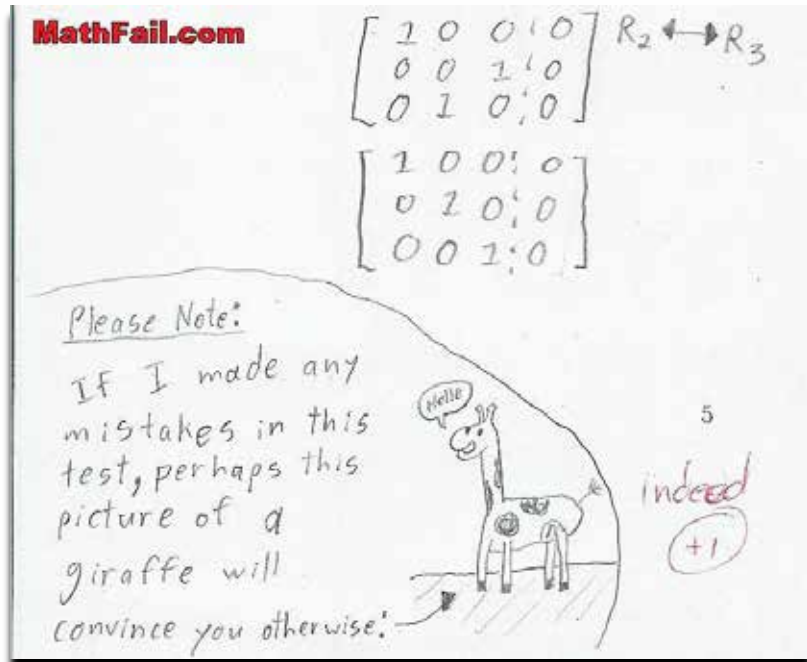
- Applies principles or theories of laboratory management
- Selects instruments (equipment) for the laboratory
- Selects systems for the laboratory
- Selects course of action
- Develops policies and procedures
- Develops goals and objectives
- Develops strategies and plans

Operations Management (29%)

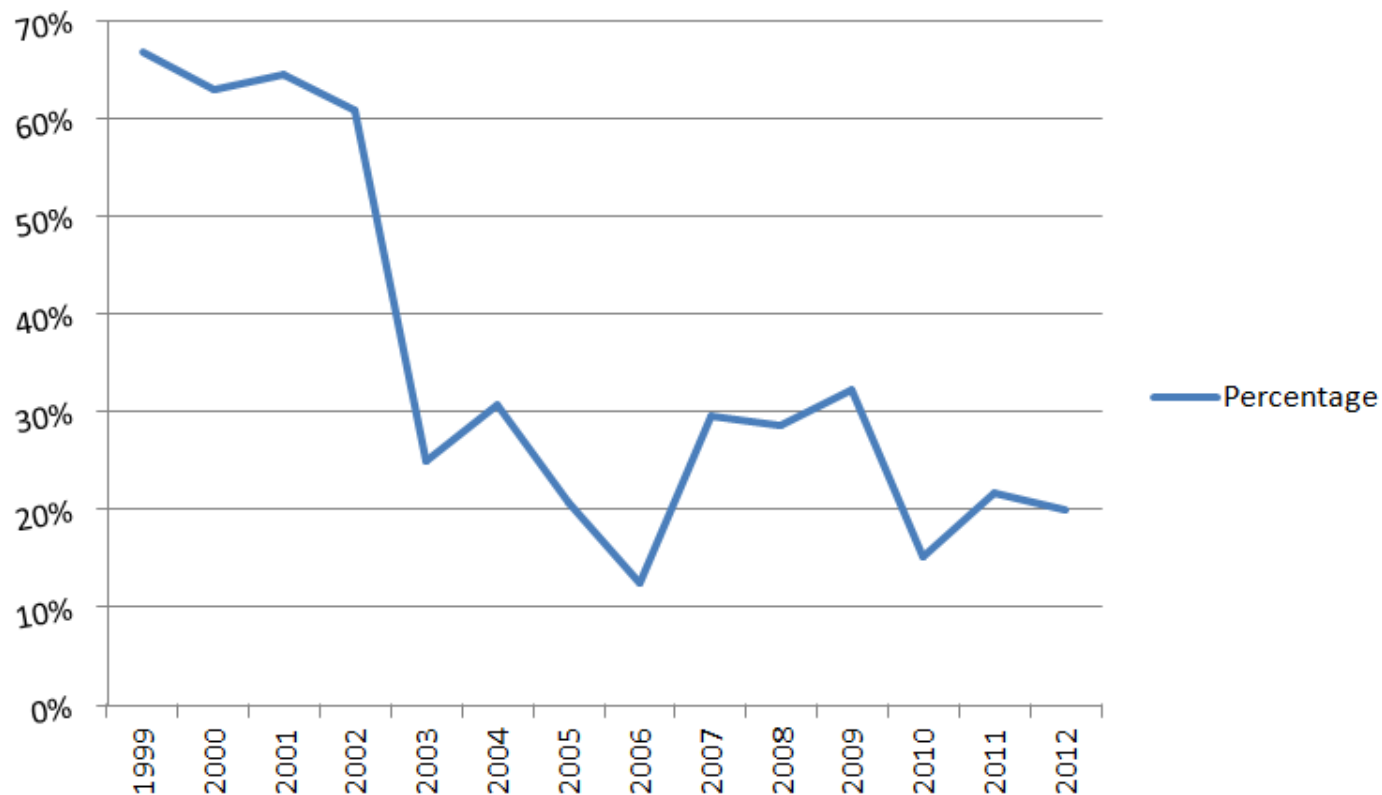
- Develops programs
- Establishes laboratory systems
- Establishes procedural course of action
- Analyzes sources of error
- Analyzes data and laboratory activities
- Evaluates sources of error
- Evaluates progress towards goals
- Implements strategies and proposals

Marketing Management (12%)

- Applies knowledge of market sectors



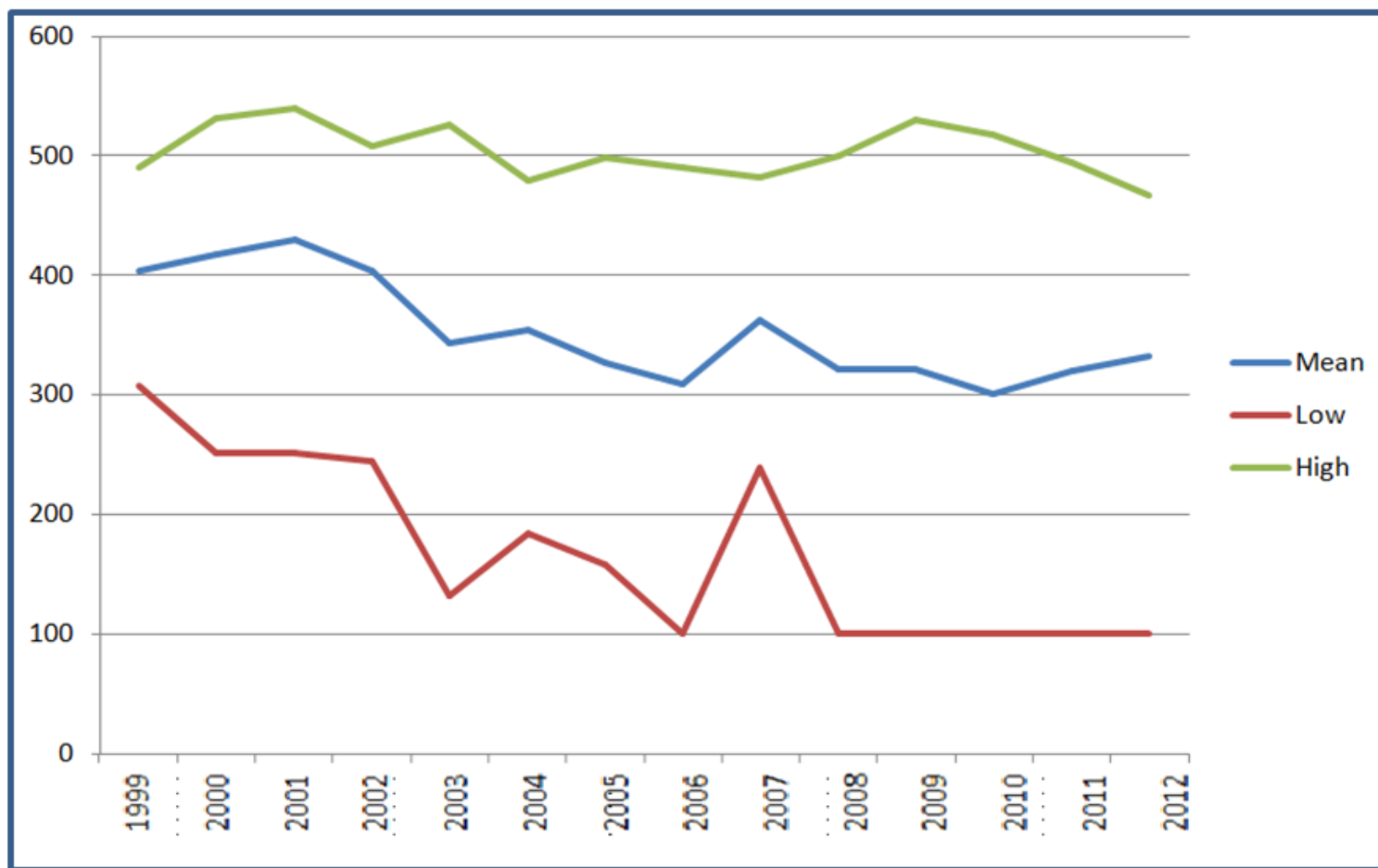
Percentage DLM Pass

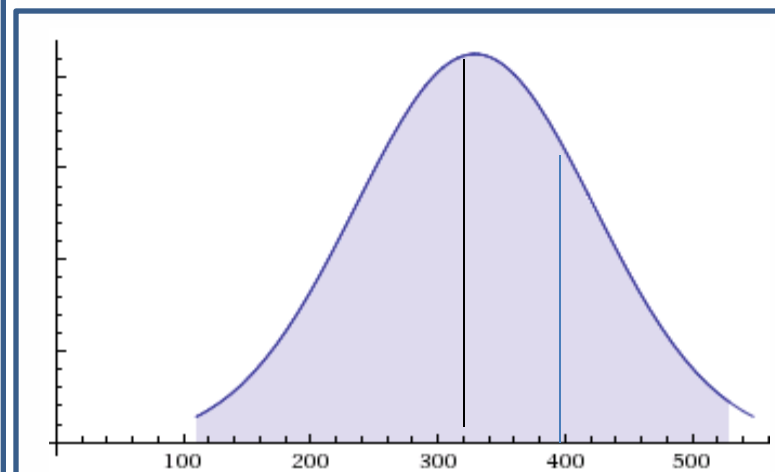
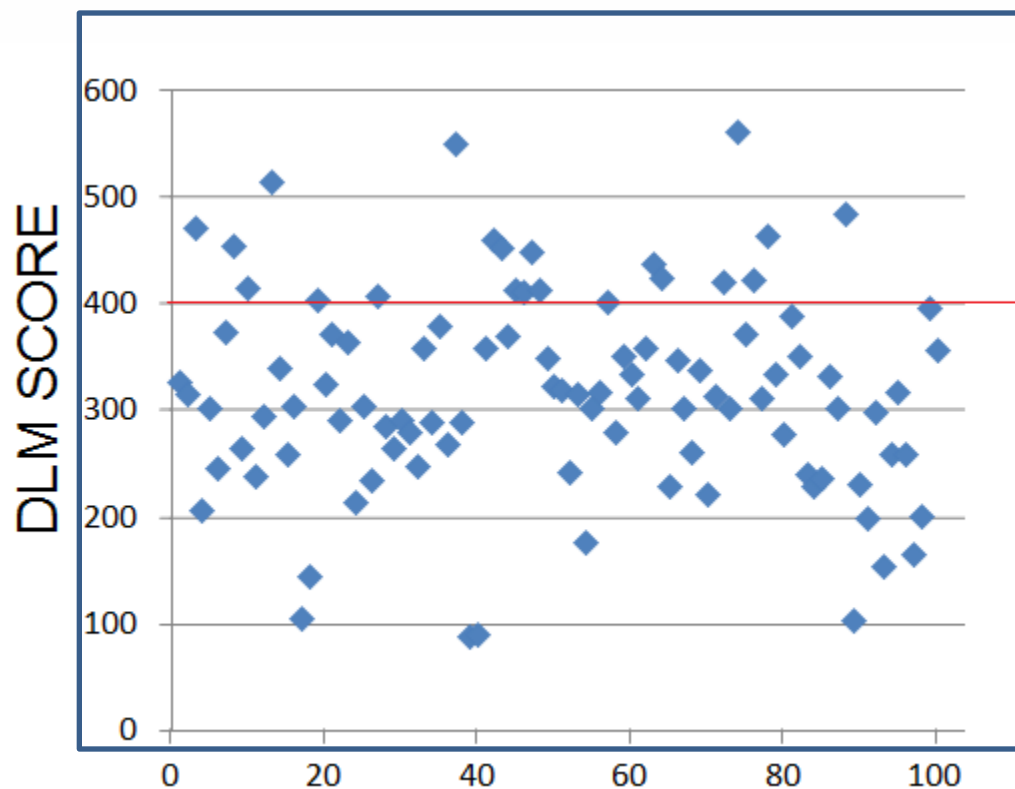




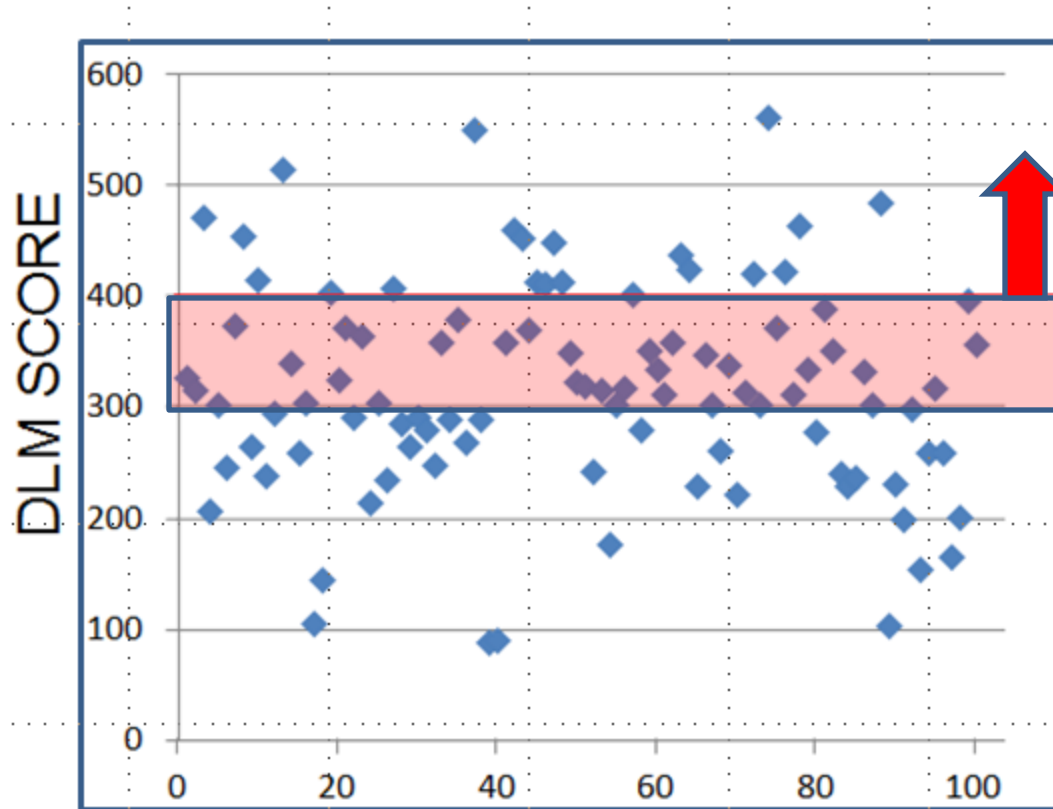
Only 67 DLM(ASCP) in last 10 years...what a great opportunity!!!

Only 67 DLM(ASCP) in last 10 years....I'll never pass this!



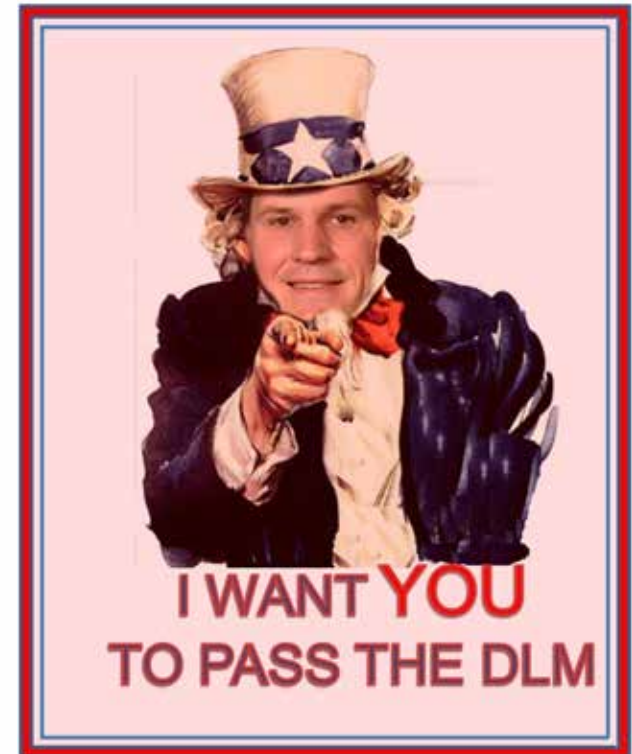


- Simulation of 100 DLM Candidates
- Based on Mean of 328 and SD of 94
- Numbers generated at Random.org
- 21 Passed in this simulation



- Bump the 300-400 score range up to passing – now 60% pass rate

- Need a Plan
- Honestly Evaluate Self
- No Self-Inflicted Wounds
 - Put in the Study Time
 - Utilize Resources
- Implement Strategy



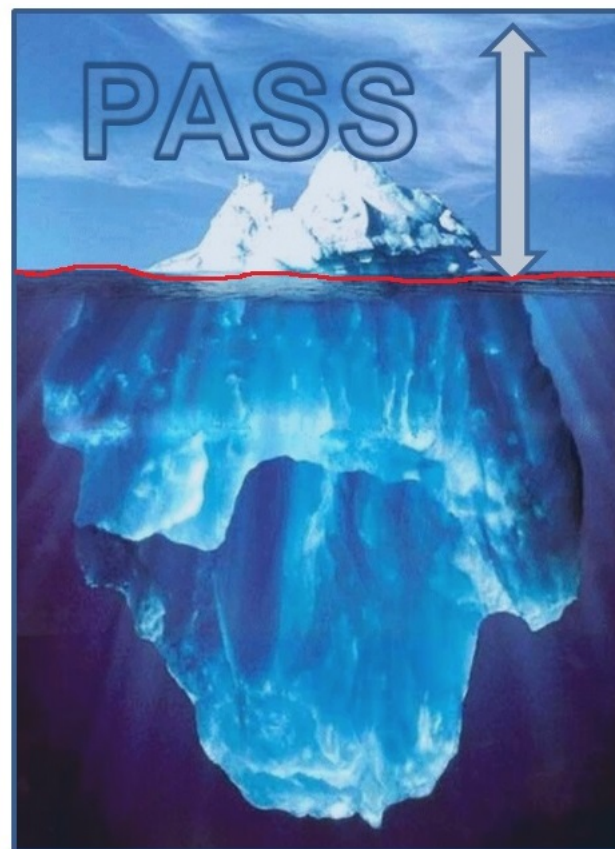
- <400 = Not Enough
- >400 = Enough



100

400

999



400

- Do Not View Content As Similar To MLS
- Accept That You Are Probably Weak In Several Areas
- ASCP Only Requires Experience in 20/32 Areas
- Identify Your Weak Areas – Most Improvement Can Be Made Here
- Concentrate On What You Can Know (or can know), Not What You Don't Know

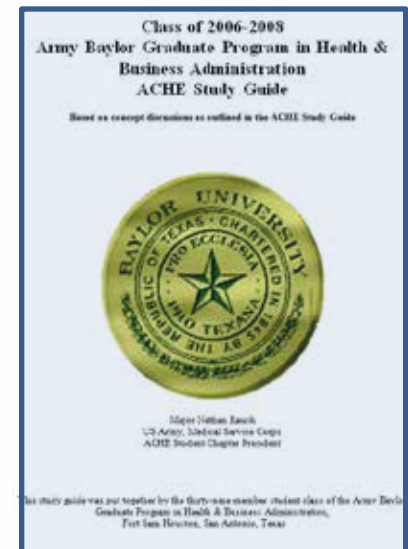
- No Official ASCP Study Guide
- Are There Similar Tests?
- Resources For Weak Areas (targeted improvement)
- Test Strategies

- Two Hour & 30 Min
- 100 Questions (1.5 min per question)
- Computer Adaptive Testing (CAT)
- Each question in the test bank is calibrated for level of difficulty
- Your preliminary test results (pass/fail) will appear on the computer screen (hint)
- Non-programmable calculators are allowed

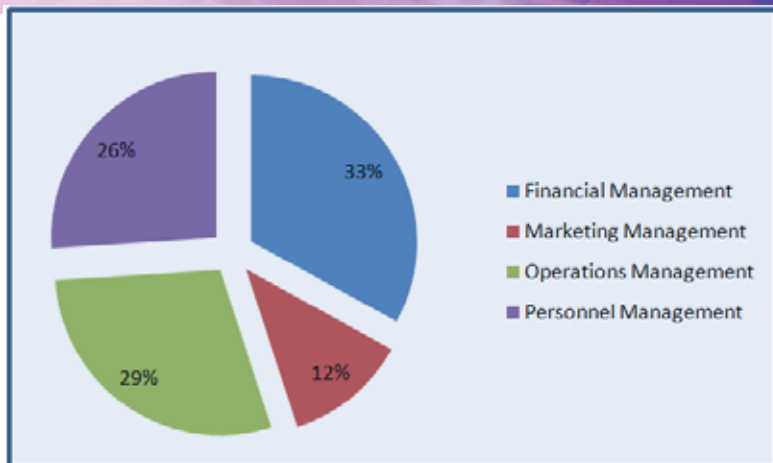
- ASCP Does Provide Extensive Reading List
<http://www.ascp.org/PDF/BOC-PDFs/Bibliography/ReadingListDLM.aspx>
- 3 Journals, 7 General Texts, 14 Specialized Texts, 10 Online References
- BOC practice tests available for purchase
- <http://www.ascp-practice.com>
- BOC Study Guide (5th Edition) has >50
- pages on Laboratory Operations
- <http://www.ascp.org/PDF/Publications-PDFs/5867.pdf>
- Medical Laboratory Management and Supervision(1st Edition, 1996) has over 400 Study Questions

- ACHE Board of Governors Exam
- 31 of 32 Areas on DLM Are on This Exam
- Only Education & Training/Continuing Ed not Covered
- 18 Sample Questions
- http://www.ache.org/membership/credentialing/EXAM/go_vselftest.cfm
- BOG Reference Manual – has some good descriptions
http://www.ache.org/membership/credentialing/EXAM/BOG_exam_reference_manual.pdf
- Review Course Available
- <http://www.ache.org/seminars/special/index.cfm?meet=BOGER13B&nav=1&subnav=4>

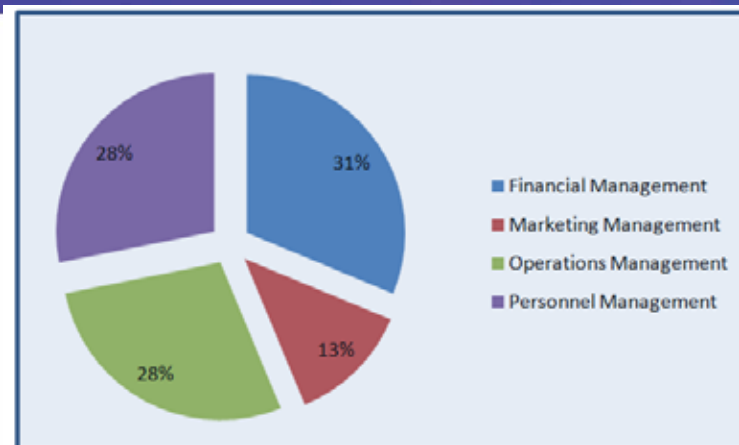
- Army Baylor ACHE Study Guide
- 126 Comprehensive Review
- Search "Army Baylor" & ACHE
- AAMA Study Guide
- <http://www.aameda.org/ProfAdvancement/documents/CAAMASTudyGuide2012.pdf>
- Many examples on Internet of reviews/tests for specific classes



What Do I Study?



DLM Test Questions - % By Topic



DLM Content Outline - % Topics Sub Category

CONTENT OUTLINE

DIPLOMA IN LABORATORY MANAGEMENT

Refer to the CGAP Competency Statements for the competencies listed in each sub-set. The *alignments* indicate the percent of items that will appear on the examination in each subject. *Alignments* within each subject are those on planning, organizing, leading, controlling, coordinating and managing.

I. Financial Management (37%)		II. Personnel Management (26%)	
A. Budget		A. Motivation	
B. Capital Equipment Acquisition		B. Staffing/Recruiting	
C. Cost Analysis		C. Performance Standards/Evaluations	
D. Materials Management: Purchasing		D. Counseling/Disciplinary Action	
E. Financial Accounting		E. Education & Training/Continuing Education	
F. Work environment Issues		F. Job Descriptions	
G. Materials Management: Inventory Control		G. Wage & Salary Administration	
H. Contract Negotiations		H. Personnel Negotiations	
I. Cash Flow Analysis		I. Conflict Resolution	
J. Billing and Collection			

III. Operations Management (29%)		IV. Marketing Management (12%)	
A. Performance Improvement		A. Product Development	
B. Lineup/Line/Expedition		B. Consumer Relations/Outpatient Services	
C. Safety		C. Market Research/Planning	
D. Infrastructure/Departmental Relations (w/ Physical Chemists)		D. Managed Care	
E. Information Technology			
F. Risk Management/Medical Legal Issues			
G. Facilities Management			
H. Data Management			
I. Productivity			

At least 60% of Certification examinations use conventional items for results and reference ranges.

This will need to bring a management/coordination to the examination.

END OF CONTENT GUIDELINE

If Evenly
Distributed, ~3
Questions Per
Sub Category

Self Evaluation

	Experience	Self Rating (1-10)
Financial Management		
• Billing and collection		
• Budgets		
• Capital equipment acquisition		
• Cash flow analysis		
• Contract negotiations		
• Cost analysis		
• Financial accounting		
• Materials management: inventory control		
• Materials management: purchasing		
• Reimbursement issues		
Marketing Management		
• Consumer relations		
• Managed care		
• Market research		
• Product development		

	Experience	Self Rating (1-10)
Operations Management		
• Data management		
• Facilities management		
• Information technology		
• Intra/Interdepartmental relations		
• Licensure/accreditation/regulatory		
• Performance improvement		
• Productivity		
• Risk management/medical legal issues		
• Safety		
Personnel Management		
• Conflict resolution		
• Counseling /disciplinary action		
• Education and training/continuing ed		
• Job descriptions		
• Motivation		
• Performance standards/evaluations		
• Personnel negotiations		
• Staffing/scheduling		
• Wage and salary administration		

Example Prioritization

	Experience	Self Rating (1-10)
Operations Management		
• Data management	x	
• Facilities management		9
• Information technology		1
• Intra/Interdepartmental relations	x	
• Licensure/accreditation/regulatory	x	
• Performance improvement		4
• Productivity	x	
• Risk management/medical legal issues		10
• Safety		2
Personnel Management		
• Conflict resolution	x	
• Counseling /disciplinary action	x	
• Education and training/continuing ed		7
• Job descriptions	x	
• Motivation		3
• Performance standards/evaluations	x	
• Personnel negotiations		1
• Staffing/scheduling	x	
• Wage and salary administration	x	

TOP 5 TO STUDY

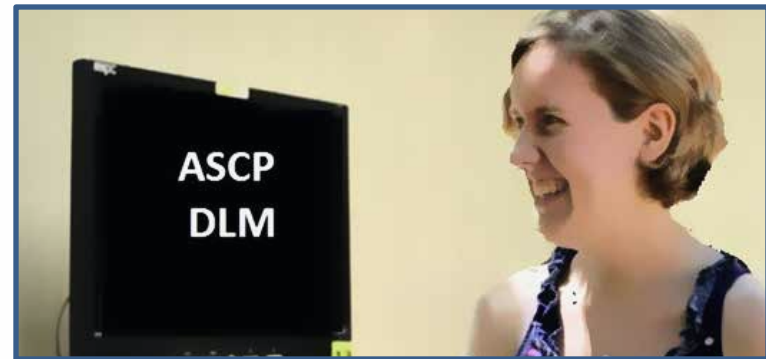
- Information Technology
- Personnel Negotiations
- Safety
- Motivation
- Performance Improvement

- Many Websites That Give Great Advice For Multi-Choice Test Takers
 - <http://www.uwec.edu/geography/ivogeler/multiple.htm>
 - <http://suite101.com/article/10-multiple-choice-test-taking-strategies-a254109>
 - <https://www.excelsior.edu/web/student-online-success-guide/testing-strategies>

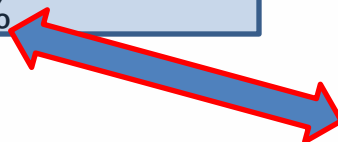
- The Easy Questions Will Be Obvious
- For All Other Questions, Determine The Wrong Answer and Eliminate That
- Consider These Two Test Takers



Knows 50%
Total Guesses 50%
Answered Correctly 62%



Knows 50%
Eliminates 1 Responses 15%
Eliminates 2 Responses 15%
Total Guess 20%
Answered Correctly 68%



10 Useful Websites For Study

Joint Commission	www.jointcommission.org
Collage of American Pathologists	www.cap.org
American Soceity for Clinical Pathology	www.ascp.org
Clinical Laboratory Management Association	www.clma.org
American Pathology Foundation	www.apfconnect.org
Occupational Safety & Health Administration	www.osha.gov
Accreditation Association for Ambulatory Health Care	www.aaahc.org
COLA	www.cola.org
American College of Healthcare Executives	www.ache.org
Healthcare Finanical Management Association	www.hfma.org

• Pam Pohly's Net Guide

<http://www.pohly.com/>

Website Index

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[Directory of 1,000 Healthcare Recruiters](#) Updated

[Health Administration Toolbox](#)

[Calendar of Health Observance Dates](#)

[Recommended Reading Lists & Healthcare Bookstore](#) New!

[Job Search Resources](#)

[Career & Interview Resources](#)

[Glossary of Managed Care Terms](#)

[Health Care Companies & Hospitals](#)

[Health & Medical Associations](#)

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Toolbox for Health Administration

This Guide provides 16 pages of articles, information and resources pertinent to health administrators and medical professionals. You will find information regarding legal issues, economics, legislation, industry news, regulations, practice management, hospital administration, compliance, salary surveys, business strategy, human resources, healthcare employment, managed care terminology and much more. Before exploring the pages below, which shall open in new windows, please go ahead and bookmark this site first. If you do, then you will be able to return back here effortlessly in the future. [Add this Guide to your favorites.](#)

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- [Health Reform](#) - health care reform, policy, law, ethics
- [Hospital Associations](#) - hospital associations, by state & metro areas
- [Human Resources](#) - for HR, staffing and personnel resources
- [Information Systems & Software](#) - technology, medical records, telehealth
- [Legal, Governmental & Regulatory](#) - compliance & accreditation resources
- [Medical & Clinical Sites](#) - patient education; consumer information
- [Mental Health Professionals](#) - behavioral health & psychiatric resources
- [Nursing & Clinical Management](#) - for nurses, allied & clinical managers
- [Physician Executives](#) - for doctor leaders, medical staff & practice managers
- [Professional Associations](#) - health & medical societies & organizations
- [Publications, Journals & News](#) - research, magazines & periodicals
- [Recommended Reading Lists](#) - reading lists & books, by healthcare discipline

Not locating exactly what you are looking for yet? Have you consulted our [Home Page](#)?

If you have not found what you are searching for yet, please feel free to use our search engine below. We have a large quantity of information located within this health administration website.

Unlike Other ASCP Exams, Not 100% Lab Specific

	GENERAL	HEALTHCARE	LAB SPECIFIC
Financial Management			
• Billing and collection		HEALTHCARE	
• Budgets	GENERAL		
• Capital equipment acquisition	GENERAL		
• Cash flow analysis	GENERAL		
• Contract negotiations	GENERAL		
• Cost analysis	GENERAL		
• Financial accounting	GENERAL		
• Materials management: inventory control		HEALTHCARE	
• Materials management: purchasing	GENERAL		
• Reimbursement issues		HEALTHCARE	
Marketing Management			
• Consumer relations	GENERAL		
• Managed care		HEALTHCARE	
• Market research	GENERAL		
• Product development	GENERAL		
Operations Management			
• Data management		HEALTHCARE	
• Facilities management		HEALTHCARE	
• Information technology		HEALTHCARE	
• Intra/Interdepartmental relations		HEALTHCARE	
• Licensure/accreditation/regulatory			LAB SPECIFIC
• Performance improvement	GENERAL		
• Productivity		HEALTHCARE	
• Risk management/medical legal issues		HEALTHCARE	
• Safety			LAB SPECIFIC
Personnel Management			
• Conflict resolution	GENERAL		
• Counseling /disciplinary action	GENERAL		
• Education and training/continuing ed		HEALTHCARE	
• Job descriptions	GENERAL		
• Motivation	GENERAL		
• Performance standards/evaluations	GENERAL		
• Personnel negotiations	GENERAL		
• Staffing/scheduling	GENERAL		
• Wage and salary administration	GENERAL		



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Resources For Weak Areas





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Billing and Collection





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Budgets





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Capital equipment acquisition



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Cash flow analysis





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Contract negotiations



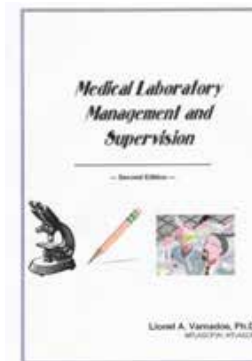


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Cost analysis



- In last 10 years, pass rates not good.....
- Tremendous Opportunity, Supply and Demand!
- 953 have been certified since 1989 (~47/year)
- Study Guides Available
- Medical Laboratory Management and Supervision, 2nd Ed. (<http://priorityed.com/>)



- CLMA Body of Knowledge
- Lionel Varnadoe - Medical Laboratory Management and Supervision: Operations, Review, and Study Guide
- ASCP Recommended - <http://www.ascp.org/PDF/BOC-PDFs/Bibliography/ReadingListDLM.aspx>
- Laboratory Management University
- ASCP MT Exam
- Laboratory Problem Solver
- Joint Commission Accreditation Manual
- CAP Checklists
- Google Books - Preview
- [The CLMA guide to managing](#) a clinical laboratory
- Anthony S. Kurec, Stanley Schofield, Marianne C. Watters
Administration and supervision in laboratory medicine

	Varnadoe - Operations, Review, & Study Guide
	CHAPTER
Financial Management	
• Billing and collection	12
• Budgets	15
• Capital equipment acquisition	15
• Cash flow analysis	12
• Contract negotiations	4, 14, 23
• Cost analysis	12
• Financial accounting	12
• Materials management: inventory control	14
• Materials management: purchasing	14
• Reimbursement issues	12
Marketing Management	
• Consumer relations	3, 20, 23
• Managed care	23
• Market research	23
• Product development	23
Operations Management	
• Data management	16
• Facilities management	9, 21
• Information technology	16
• Intra/Interdepartmental relations	3, 20
• Licensure/accreditation/regulatory	22
• Performance improvement	20
• Productivity	13
• Risk management/medical legal issues	20
• Safety	19
Personnel Management	
• Conflict resolution	11
• Counseling /disciplinary action	3, 10, 20
• Education and training/continuing ed	11
• Job descriptions	9
• Motivation	6, 7
• Performance standards/evaluations	9, 10
• Personnel negotiations	11
• Staffing/scheduling	9, 18
• Wage and salary administration	13

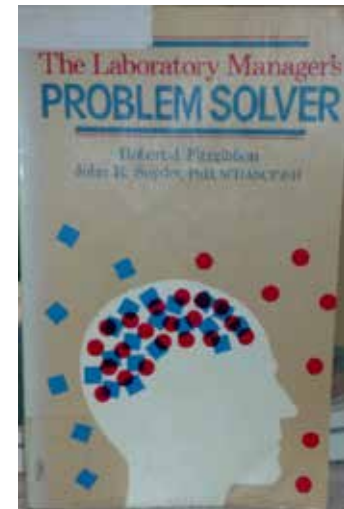


Used online price - ~\$20

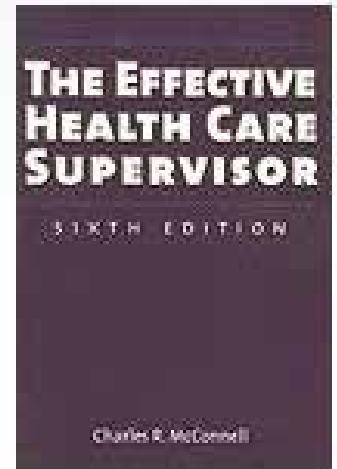
- Michael Nowicki – Financial Management of Hospitals and Healthcare Organizations
- 2001 Edition, great examples of basic accounting and simple problems (i.e. breakeven analysis)
- Can be found on internet for \$0.75 plus shipping.



- Dated, Topics Still Relevant
- Good Book To Get Juices
- Flowing
- Can Be Bought For Under \$4
- Many Other Similar Examples
- You Don't Need To Spend A Fortune On Areas That Don't Change Much (e.g. Motivation)



- The Effective Health Care Supervisor by Charles R. McConnell - 6th Edition
- Good Overview of Many Topics on DLM Exam
- Can Be Purchased for <\$1



- Developed by COLA
- Specific Courses That May Be Beneficial
- OSHA and Lab Safety Course
- Continual Improvement
- Information Management
- Customer Focus
- <http://www.labuniversity.org/>

- Certificate program – 25 Online Courses
- Leadership, Personnel Management, Operations, Financial Management, Informatics, Compliance
- \$599 Fee
- Collaboration Between APF and ASCP
- Study groups for DLM Certification
- Resources designed to reinforce learning
- 3 Years to Complete Program
- <http://www.ascp.org/Functional-Nav/Lab-Management-University.html#>

- Certificate/graduate programs
 - CLS Programs
 - Business Programs
- Online Coursework
 - Free Open Courseware
 - Example – MIT offers free financial accounting course

<http://ocw.mit.edu/courses/sloan-school-of-management/15-511-financial-accounting-summer-2004/>

