

# FBLA Collegiate Business Law<sup>§</sup>

## Fundamentals of Business Law (20 test items)

1. Comply with the spirit and intent of laws and regulations (BL:163, LAP-BL-163) (CS)
2. Discuss the nature of law and sources of law in the United States (BL:067) (SP)
3. Describe the United States' judicial system (BL:068) (SP)
4. Describe methods used to protect intellectual property (BL:051) (SP)
5. Describe legal issues affecting businesses (BL:001) (SP)
6. Explain types of business ownership (BL:003, LAP-BL-003) (CS)

## Torts and Contract Law (5 test items)

1. Identify the basic torts relating to business enterprises (BL:069) (SP)
2. Describe the nature of legally binding contracts (BL:002) (SP)

## International Law (10 test items)

1. Discuss the nature and sources of international law (i.e., treaties and international customs) (BL:142) (MN)
2. Discuss the nature and sources of foreign law (i.e., country judicial and legislative actions) (BL:143) (MN)
3. Explain the impact of global legal systems on settling international business disputes (BL:144) (MN)

## Tax Laws and Regulations (10 test items)

1. Explain the nature of tax regulations on business (BL:009) (ON)
2. Explain the nature of businesses' reporting requirements (BL:010) (ON)
3. Develop strategies for legal/government compliance (BL:011) (ON)

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<sup>§</sup> Sources: These learning outcomes are part of MBA Research's National Business Administration Standards.

### **Legal Environment of Business (10 test items)**

1. Describe factors affecting the settlement of legal matters (BL:159) (SP)
2. Explain legal considerations for finance (FI:356) (SP)
3. Explain legal considerations for accounting (FI:353) (SP)
4. Explain legal issues associated with information management (NF:076) (SP)

### **Regulatory Environment (15 test items)**

1. Describe the nature of legal procedure (BL:070) (SP)
2. Discuss the nature of debtor-creditor relationships (BL:071) (SP)
3. Explain the nature of agency relationships (BL:072) (SP)
4. Discuss the nature of environmental law (BL:073) (SP)
5. Discuss the role of administrative law (BL:074) (SP)

### **Human Resources Laws and Regulations (15 test items)**

1. Explain the nature of human resources regulations (BL:007) (SU)
2. Explain the nature of workplace regulations (including OSHA, ADA) (BL:008) (SU)
3. Describe health and safety regulations in business (OP:004) (PQ)
4. Discuss employment relationships (BL:075) (SU)

### **Commerce Laws and Regulations (15 test items)**

1. Explain the nature of import/export law (BL:145) (SP)
2. Describe the nature of customs regulations (BL:126) (SP)
3. Explain the nature of trade regulations (BL:004) (MN)
4. Describe the impact of antitrust legislation (BL:076) (MN)

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<https://www.apu.apus.edu/area-of-study/security-and-global-studies/resources/what-is-business-law/>

University of Pittsburgh. *What is business law? Exploring the importance for companies.*

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## LAP List

Objective #	LAP #*	LAP Title
<b>BL:163</b>	LAP-BL-163	Laying Down the Law (Complying With the Spirit and Intent of Laws and Regulations)
<b>BL:003</b>	LAP-BL-003	Own It Your Way (Types of Business Ownership)

\* LAP #s subject to change

# FBLA Collegiate Cybersecurity\*

## Security Fundamentals (10 test items)

1. Describe examples of confidentiality, integrity, and availability in cybersecurity operations
2. Discuss measures for establishing digital trust (e.g., identity proofing, non-repudiation, attestation)
3. Explain how authentication, authorization, and accounting are implemented in practice
4. Analyze principles of Zero Trust present in security architectures
5. Discuss examples of binary and hexadecimal in cybersecurity
6. Perform basic arithmetic involving binary and hexadecimal
7. Analyze examples of least privilege principles

## Cyber Threats and Vulnerabilities (20 test items)

1. Analyze the causes of SQL injection and buffer overflow vulnerabilities (e.g., poor input validation, memory management)
2. Analyze the causes, mechanics, and consequences of race conditions (e.g., critical sections, information leak, crash)
3. Discuss attributes of threat actors and their goals (e.g., internal and external threats, financial gain, espionage, data theft)
4. Analyze how different viruses infiltrate systems and spread (e.g., boot sector, polymorphic, macro)
5. Analyze how backdoors, zero-days, and outdated software can lead to cybersecurity incidents
6. Discuss social engineering scams and attacks (e.g., phishing, phone scams, email scams)
7. Describe the purpose, methods, and mechanics of a DDoS attack
8. Analyze effects of and defense against types of malware (e.g., viruses, Trojans, worms)
9. Describe the consequences and mechanics of cryptographic attacks on enterprise systems
10. Evaluate the security of a wireless network

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\* Sources: These learning outcomes are based on content from the Cybersecurity Curricula 2017, Security+ Certification Exam Objectives, and K-12 Cybersecurity Learning Standards.

## Security and Design (20 test items)

1. Analyze the security benefits and drawbacks of cloud infrastructure (e.g., IaaS, SaaS, PaaS)
2. Recommend changes to cybersecurity policies based on system architecture (e.g., microservice, cloud-based, hybrid)
3. Discuss use cases and examples of logical and physical segmentation (e.g., VLANs, subnets, air-gapped systems)
4. Analyze security use cases for containerization and virtualization in enterprise systems
5. Recommend a backup schedule based on an organization's needs (e.g., differential, incremental, full)
6. Recommend RAID levels based on an organization's needs (e.g., level 0, level 5)
7. Discuss types of testing used in cybersecurity
8. Analyze the impact of physical network design decisions on cybersecurity
9. Discuss key considerations in designing secure systems (e.g., availability, resilience, cost, responsiveness)
10. Discuss ways to increase resilience and recovery in design (e.g., load balancing, clustering, multi-cloud, platform diversity, backups)

## Network and Data Security (20 test items)

1. Discuss the role of cryptography in ensuring confidentiality, integrity, authentication, and non-repudiation
2. Analyze the benefits and drawbacks of public and private key cryptography
3. Describe the mechanics of public and private key cryptography
4. Discuss types of ciphers (e.g., shift, Caesar, substitution)
5. Discuss logical access control methods (e.g., access control lists, group policies, passwords)
6. Analyze differences between access control models (e.g., MAC, DAC, RBAC)
7. Analyze network authentication methods (e.g., multifactor, certificates, tokens)
8. Describe the characteristics of effective and ineffective hash functions (e.g., collisions, distribution, efficiency)
9. Discuss the advantages and disadvantages of using blockchain for data integrity and authentication

## Security Operations and Management (10 test items)

1. Discuss common security policies (e.g., acceptable use, information security, business continuity, disaster recovery)
2. Discuss elements of disaster prevention and recovery plans
3. Discuss the use cases of different types of firewalls (e.g., network-based, NGFW, WAF)
4. Evaluate messaging, email, and data security policies for risk management
5. Describe change management practices

## Security Protocols and Threat Mitigation (20 test items)

1. Describe the purposes of SSH, HTTPS, TLS, and WPA protocols
2. Explain how intrusion detection and prevention systems work (e.g., signature-based, anomaly-based, NIDS)
3. Evaluate the effectiveness of policies and practices for preventing viruses, phishing, and email scams
4. Analyze different types of obfuscation (e.g., code, data, network)
5. Explain how digital certificates and Certificate Authorities (CAs) contribute to security
6. Explain how patches, updates, and version control prevent attacks
7. Discuss examples of penetration testing
8. Describe a VPN and its uses in cybersecurity
9. Describe security protocols used by VPNs and their characteristics (e.g., TLS, OpenVPN, L2TP, IPsec)

## References

- Adelaide University. *Cyber security basics: Exploring the fundamentals of cyber security*.  
<https://online.adelaide.edu.au/blog/cyber-security-fundamentals>
- Association for Computing Machinery. *Cybersecurity Curricula 2017*.  
[https://cybered.hosting.acm.org/wp-content/uploads/2018/02/newcover\\_csec2017.pdf](https://cybered.hosting.acm.org/wp-content/uploads/2018/02/newcover_csec2017.pdf)
- Codecademy. *Introduction to cybersecurity*. <https://www.codecademy.com/learn/introduction-to-cybersecurity>
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# FBLA Collegiate Foundations of Computer Science<sup>1</sup>

## Software Development Basics (15 test items)

1. Explain the steps of the software development life cycle (SDLC)
2. Discuss object-oriented and functional programming paradigms
3. Describe key features of object-oriented programming (e.g., encapsulation, abstraction, polymorphism, inheritance)
4. Discuss the use of comments in programs
5. Discuss the use of APIs and third-party libraries in programs
6. Discuss the importance of testing for software development
7. Discuss debugging methods
8. Interpret documentation for functions and classes

## Algorithmic Foundations (15 test items)

1. Describe basic data structures (e.g., arrays, lists, hashmaps)
2. Describe basic sorting algorithms (bubble sort, heap sort, merge sort, etc.)
3. Explain recursive algorithms and their use cases
4. Describe the speed and memory performance of simple algorithms
5. Describe basic search algorithms (e.g., linear, binary, two pointers)
6. Describe the advantages and disadvantages of hash tables
7. Write an algorithm in pseudocode to solve a problem

## Database Fundamentals (10 test items)

1. Create a relational database with tables, records, fields, primary keys, and foreign keys
2. Write basic SQL queries to obtain specific data sets
3. Design database tables to satisfy requirements

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\*Sources: These learning outcomes are based on content from the Computer Science Curricula 2023, Cybersecurity Curricula 2017, K-12 Computer Science Standards, and Ohio's Standards for Computer Science.

## Programming Fundamentals (15 test items)

1. Identify variables by name, data type, scope, and value
2. Call functions with multiple parameters
3. Discuss types of statements (assignment, function calls, control flow, etc.)
4. Describe characteristics of a class or object (attributes, constructors, methods, etc.)
5. Use I/O to create, read from, write to, and delete files
6. Predict the output of a block of code with specified inputs
7. Distinguish between pass-by-value and pass-by-reference
8. Evaluate expressions with function calls, variables, and Boolean logic

## Systems Foundations (15 test items)

1. Convert among common data representations (e.g., binary, hexadecimal, decimal)
2. Describe the basic architecture of a computer (e.g., CPU, ALU, buses)
3. Explain the functions of the operating system kernel
4. Discuss the memory hierarchy for computer storage (e.g., caches, registers, RAM)
5. Discuss the importance of locality in computer performance and organization
6. Describe the role of logic gates in computer systems (arithmetic, logic, ALU, etc.)

## Networking Foundations (10 test items)

1. Explain how data is transmitted between nodes (packets, packet switching, routers, switches, etc.)
2. Identify types of networks and their uses (WAN, LAN, Wi-Fi, etc.)
3. Discuss the functions of DNS, IP addresses, and MAC addresses
4. Describe the layers of the OSI model
5. Explain basic networking protocols (TCP/IP, UDP, DHCP, etc.)

### **Cybersecurity Foundations (10 test items)**

1. Discuss common cyber attacks and vulnerabilities (DoS, DDoS, phishing, SQL injection, malware, etc.)
2. Describe authentication methods (multi-factor authentication, digital certificates, SSO, etc.)
3. Describe confidentiality, integrity, and availability
4. Explain symmetric and asymmetric cryptography

### **Artificial Intelligence Foundations (10 test items)**

1. Describe foundational algorithms for artificial intelligence (e.g., minimax, search algorithms, alpha-beta pruning)
2. Explain machine learning paradigms (e.g., supervised, unsupervised, reinforcement learning)
3. Describe the concept of neural networks
4. Describe how problems are formulated for AI (initial state, action, transition, etc.)
5. Describe the characteristics of AI agents (autonomy, decision-making, perception, etc.)

## References

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# FBLA Collegiate Foundations of Digital Design<sup>‡</sup>

## Design Principles (30 test items)

1. Describe the elements of design (PR:222) (SP)
2. Discuss 2D design characteristics (e.g., value, texture, contrast)
3. Discuss the use of positive and negative space
4. Explain the rule of thirds
5. Discuss the use of basic design principles (e.g., emphasis, movement, balance, variety)
6. Discuss Gestalt principles in design (e.g., similarity, proximity, continuity, closure, perception, organization, symmetry)
7. Explain the impact of color harmonies on composition (PR:314) (SP)
8. Discuss the psychological and aesthetic impacts of color

## Typography and Layout (30 test items)

1. Discuss the nature of typography (PR:295) (SP)
2. Describe kerning, tracking, and leading in typography
3. Discuss the impact of typography on design
4. Explain how typography decisions may be influenced by tone, audience, and purpose
5. Define typography terms (e.g., font, typeface, ascender, serif)
6. Discuss the effects of document design elements (e.g., white space, headings, line lengths)
7. Discuss the use of font pairings and font hierarchies
8. Describe typeface categories and characteristics (e.g., serif, sans serif, script, monospaced, display)
9. Discuss relationships between layout elements (e.g., contrast, repetition, alignment, proximity)
10. Discuss framing concepts in layout design (e.g., cropping, bleeds, margins, borders)

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<sup>‡</sup> Sources: These learning outcomes are based on MBA Research's National Business Administration Standards, Adobe Certified Professional Photoshop Exam, Borough of Manhattan Community College's Foundations of Digital Graphic Design, AIGA's Graphic Design Curriculum, eDynamic Learning's Digital Design Introduction course, and Google UX Design Professional Certificate.

## **Digital Design Technology (20 test items)**

1. Discuss raster software and vector-based image technology
2. Discuss industry standard design software (e.g., Photoshop, InDesign, Blender)
3. Describe digital color concepts (PR:274) (SP)
4. Discuss key terms related to digital images (e.g., resolution, size, resampling, rendering)
5. Discuss types of image files and their characteristics (e.g., JPEG, PNG, SVG)
6. Explain bit depth and color gamut

## **User Experience and Accessibility (20 test items)**

1. Discuss the importance of accessibility in design
2. Describe legal accessibility requirements for websites or other digital products
3. Discuss how design decisions can impact accessibility (e.g., colors, typography, layout)
4. Discuss elements of the design process (e.g., researching, brainstorming, collecting feedback)
5. Describe the importance of user feedback in the design process
6. Identify website design/components (PR:336) (MN)

## References

- Borough of Manhattan Community College. *Foundations of Digital Graphic Design*.  
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## FBLA Collegiate Foundations of Selling<sup>§</sup>

### Selling Fundamentals (25 test items)

1. Explain the nature of professional selling (PD:120) (SP)
2. Explain the nature and scope of the selling function (SE:017, LAP-SE-017) (CS)
3. Explain the role of customer service as a component of selling relationships (SE:076, LAP-SE-076) (CS)
4. Explain company selling policies (SE:932, LAP-SE-932) (CS)
5. Explain key factors in building a clientele (SE:828, LAP-SE-828) (SP)
6. Explain legal and ethical considerations in selling (SE:106, LAP-SE-106) (SP)
7. Describe the use of technology in the selling function (SE:107) (SP)
8. Discuss the economic and social effects of professional selling (PD:131) (SP)
9. The impact of sales and buying cycles (SE:380) (SP)
10. Describe the impact that digital communication is having on selling (SE:490) (SP)

### Product Knowledge (10 test items)

1. Acquire product information for use in selling (SE:062, LAP-SE-062) (CS)
2. Analyze product information to identify product features and benefits (SE:109, LAP-SE-109) (SP)
3. Identify emerging trends for use in selling (SE:404) (SP)

### Pre-Sales Activities (15 test items)

1. Prospect for customers (SE:001, LAP-SE-001) (SP)
2. Conduct pre-visit research (e.g., customer's markets/products, customers' competitors, and competitors' offerings) (SE:369) (SP)
3. Determine sales strategies (SE:377) (SP)
4. Book appointments with prospective clients (SE:366) (SP)
5. Prepare sales presentation (SE:067) (SP)

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<sup>§</sup> Sources: These learning outcomes are part of MBA Research's National Business Administration Standards.

### **Sales Processes and Techniques (20 test items)**

1. Explain the selling process (SE:048, LAP-SE-048) (CS)
2. Establish relationship with customer/client (SE:110) (CS)
3. Determine customer/client needs (SE:111) (CS)
4. Recommend specific products (SE:114, LAP-SE-114) (CS)
5. Demonstrate good/service (SE:374, LAP-SE-374) (SP)
6. Convert customer/client objections into selling points (SE:874, LAP-SE-874) (SP)
7. Demonstrate suggestion selling (SE:875, LAP-SE-875) (SP)
8. Close the sale (SE:895, LAP-SE-895) (SP)

### **Post-Sales Activities (20 test items)**

1. Arrange delivery of purchases (SE:023) (CS)
2. Process returns/exchanges (SE:162) (CS)
3. Plan follow-up strategies for use in selling (SE:057, LAP-SE-057) (SP)
4. Provide post-sales service (SE:397) (SP)
5. Gather customer/client feedback to improve service (SE:384) (SP)
6. Conduct self-assessment of sales performance (SE:372) (SP)
7. Maintain ongoing relationship with client (SE:488) (SP)

### **Collect Payment (5 test items)**

1. Operate register/terminal (SE:153) (CS)
2. Calculate miscellaneous charges (SE:475) (CS)
3. Process sales transactions (e.g., cash, credit, check) (SE:329) (CS)

### **Career-Advancement Activities (5 test items)**

1. Explain employment opportunities in professional selling (PD:055) (SP)
2. Identify professional certification requirements available for professional salespeople (PD:141) (SP)

## References

MBA Research and Curriculum Center. *National Business Administration Standards*.

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## LAP List

Objective #	LAP #*	LAP Title
<b>SE:017</b>	LAP-SE-017	Sell Away (The Nature and Scope of Selling)
<b>SE:076</b>	LAP-SE-076	Go Beyond the Sale (Customer Service in Selling)
<b>SE:932</b>	LAP-SE-932	Sell Right (Selling Policies)
<b>SE:828</b>	LAP-SE-828	Keep Them Loyal (Key Factors in Building Clientele)
<b>SE:106</b>	LAP-SE-106	Keep it Real—In Sales (Legal and Ethical Considerations in Selling)
<b>SE:062</b>	LAP-SE-062	Get Informed (Acquiring Product Information for Use in Selling)
<b>SE:109</b>	LAP-SE-109	Find Features, Boost Benefits (Feature-Benefit Selling)
<b>SE:001</b>	LAP-SE-001	Digging for Sales (Prospecting for Customers)
<b>SE:048</b>	LAP-SE-048	Set Your Sales (The Selling Process)
<b>SE:114</b>	LAP-SE-114	Get Specific (Recommending Specific Products)
<b>SE:374</b>	LAP-SE-374	Show and Tell (Product Demonstration)
<b>SE:874</b>	LAP-SE-874	Objection Overruled (Converting Objections Into Selling Points)
<b>SE:875</b>	LAP-SE-875	Up the Ante (Suggestion Selling)

<b>SE:895</b>	LAP-SE-895	Wrap It Up (Closing Sales)
<b>SE:057</b>	LAP-SE-057	Follow Up! (Follow-Up Strategies)

\* LAP #s subject to change

# FBLA Collegiate Foundations of Technology\*

## Foundations of Computer Systems (15 test items)

1. Describe memory organization in computer systems (e.g., memory hierarchy, caches, registers)
2. Describe differences between digital, analog, discrete, and continuous systems
3. Describe different logic gates and their combinations (AND, OR, NOT, NAND, etc.)
4. Discuss methods for backing up a computer system
5. Discuss scheduling algorithms and their performances
6. Describe simple problems and solutions as state machines
7. Describe primary operating system components (e.g., registry, virtual memory, file system)
8. Analyze the functions of operating systems

## Data and AI Foundations (15 test items)

1. Discuss probabilistic and logic-based reasoning
2. Describe foundational algorithms for artificial intelligence (e.g., minimax, search algorithms, alpha-beta pruning)
3. Analyze challenges associated with big data systems
4. Discuss data sourcing, acquisition, and processing
5. Discuss the benefits of cloud computing for data processing
6. Discuss the use of data in AI and machine learning
7. Analyze the use and training of large language models (LLMs)

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\* Sources: These learning outcomes are based on content from Computing Competencies for Undergraduate Data Science, Computing Competencies for Undergraduate Programs in Information Systems, Information Technology Curricula 2017, K-12 Computer Science Standards, and Ohio's Learning Standards for Technology.

## Hardware and Software Foundations (15 test items)

1. Discuss considerations when using peripheral equipment (e.g., external storage, printers, USB)
2. Describe common methods of computer hardware maintenance
3. Discuss the characteristics of different types of computers (e.g., mainframe, PC, mobile)
4. Describe computer components (e.g., CPU, motherboard, GPU)
5. Discuss the functions of RAM and secondary storage (e.g., HDD, SDD)
6. Describe storage devices and configurations (e.g., HDD, SSD, RAID, NAS)

## Networking Systems and Protocols (20 test items)

1. Discuss the characteristics of different types of networks (e.g., LAN, MAN, WAN)
2. Explain basic networking protocols (e.g., TCP/IP, UDP, DHCP, SMP)
3. Discuss methods of connectivity (e.g., Ethernet, Wi-Fi, cable)
4. Describe the general architecture of networks (e.g., nodes, connections, switches)
5. Select an appropriate networking architecture for a business (e.g., peer-to-peer, client-server, intranet)
6. Discuss the pros and cons of network topologies (e.g., bus, star, ring)
7. Explain the purpose and mechanics of IP addressing
8. Troubleshoot network maintenance issues (e.g., securing and protecting cable)
9. Discuss common network security techniques (e.g., authorization, authentication)

## Ethics and Technology (10 test items)

1. Discuss illegal use of online technology (e.g., piracy, licensing infringement, jailbreaking for illegal purposes)
2. Discuss ethical concerns related to generative AI
3. Discuss the ethics of data brokerage and privacy online
4. Discuss ethical concerns related to AI assistants and LLMs

## Programming and Algorithms (15 test items)

1. Discuss the attributes, methods, and variables of classes and objects
2. Discuss characteristics of programming language paradigms (e.g., functional, object-oriented, imperative, declarative)
3. Analyze the time complexity of simple algorithms
4. Interpret blocks of code
5. Describe basic data structures (e.g., arrays, lists, hashmaps)
6. Describe key features of object-oriented programming (e.g., encapsulation, abstraction, polymorphism, inheritance)
7. Describe basic search and sorting algorithms
8. Discuss APIs, modules, and libraries

## Security Foundations (10 test items)

1. Discuss the applications of confidentiality, integrity, and availability
2. Evaluate vulnerabilities in a digital system (e.g., human error, authorization, authentication)
3. Describe strategies to defend against common cyber attacks (e.g., DoS, DDoS, virus)
4. Explain how insecure coding practices can lead to vulnerabilities (e.g., buffer overflow, race conditions, SQL injection)
5. Describe the differences between symmetric and asymmetric encryption
6. Discuss the use of hashing in cryptography (SHA-256, blockchain, digital signatures, etc.)

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