

Assistant Superintendent Certificate Series

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# Principles of Golf Course Business Study Guide

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**Assistant Superintendent Certificate Series  
Principles of Golf Course Business Exam Study Guide**

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## **Assistant Superintendent Certificate Series Principles of Golf Course Business Exam Study Guide**

### **Assistant Superintendent Certificate Series Exam Background**

To enhance the competency-based continuing education curriculum for assistant superintendents, GCSAA enlisted subject matter experts to define the body of knowledge (BOK) an experienced assistant superintendent possesses. Following psychometric principles for exam and study guide development, subject matter experts developed an exam testing experience and professional competence for assistant superintendents.

Successful completion of an exam demonstrates experienced professional competence as an assistant superintendent in that domain of expertise. Completion of all components of the series results in achievement of the GCSAA Assistant Superintendent Certificate, and demonstrates comprehensive professional competence for an assistant superintendent.

The information and resources in this study guide are designed to help prospective test takers prepare for the Principles of Golf Course Business exam. Included in this guide are the categories and associated competencies that will be tested and the specific testing objectives for this exam.

This resource will enable test takers to evaluate areas of existing proficiency and identify areas where additional study or practical experience might be needed. The guide also provides suggested resources for self-study and sample exam questions.

Study and preparation are essential components for success on any exam. However, real-world, hands-on experience is necessary to demonstrate competence as an assistant superintendent. Studying alone will not adequately prepare an exam taker to pass the exam.

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### **Exam Structure and Testing Requirements**

The Assistant Superintendent Certificate Series exams are online, open book exams. You will need a computer with internet access and a printer. For this exam, you may use a calculator, and it would be beneficial to have one available.

The Principles of Golf Course Business exam consists of 72 multiple choice questions that must be completed within a 3-hour timeframe. Exam questions may be accompanied by descriptive scenarios, illustrations, charts, graphs and other visual elements. The testing software will pause for a brief break at the 90-minute mark and will resume 5-minutes later. The entire exam must be completed in a single session. A passing score consists of 45 or more correct answers. Upon successful completion, you may print a personalized certificate.

If you are unsuccessful at your first attempt to pass the exam, your exam fee covers an additional attempt at no additional charge. If you are unsuccessful after both attempts, you will need to purchase the exam again for another two attempts.

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### **Self-Evaluation**

In the next section are the Principles of Golf Course Business categories, competencies and testing objectives. As you read, score yourself on what you think your level of mastery is in each area. Label each of the objectives with a number from 1 to 5 using the following scale. 5 – I could do that in my sleep. 4 – I’m comfortable with it, but not an expert. 3 – I know the topic, but I might need help. 2 – I’m aware of the topic, but haven’t ever worked with it. 1 – I’ve never seen it before.

Once you have completed your scoring, review and consider the following:

Did you score more than half the topics as a 3 or lower? If so, additional practical experience and/or mentoring may be needed for you to pass the exam.

For any category that you scored as a 5, you have a strong foundation but a refresher prior to the exam would be helpful.

Anything you scored as a 3 or 4, you will likely need to improve your knowledge base with additional study and/or hands on experience before the exam.

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Categories, Competencies and Testing Objectives

**1. Category - Business Systems**

- a. Competency – Manage Purchasing System
  - i. Testing Objective – Given invoices, delivery tickets, or statements, identify aspects of each.
  - ii. Testing Objective – Identify the circumstances when purchasing or leasing options should be used.
  - iii. Testing Objective – Identify considerations when making purchasing decisions.
  - iv. Testing Objective – Given a scenario, conduct a cost/benefit analysis to determine which product to purchase.
  - v. Testing Objective – Given a balance sheet showing purchases and expenditures, interpret the financial activity.
  - vi. Testing Objective – Given a scenario, identify cost-savings activities.
- b. Competency – Manage Inventory Control System
  - i. Testing Objective – Given a scenario, identify the resources necessary to accomplish a given maintenance task.
  - ii. Testing Objective – Identify the characteristics of accounting principles that relate to inventory and how things are expensed.
  - iii. Testing Objective – Identify storage requirements for various materials used on golf courses (for example: fuel and pesticides.)
  - iv. Testing Objective – Given a scenario, identify the amount of inventory that is needed.

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- v. Testing Objective – Given a scenario, calculate the product and equipment inventory value.
  - vi. Testing Objective – Given a scenario, calculate depreciation on given current and future equipment.
- c. Competency – Manage Accounting Duties and Budget
- i. Testing Objective – Identify the characteristics of general accounting procedures.
  - ii. Testing Objective – Given a scenario including standards, identify if the standards can be met with given financial requirements.
  - iii. Testing Objective – Identify what a variance report is.
  - iv. Testing Objective – Given a scenario, identify how to adjust expenditures as required to meet a budget.
  - v. Testing Objective – Identify the characteristics of capital budgets vs. operating budgets.
  - vi. Testing Objective – Given a scenario, forecast capital expenditures.
  - vii. Testing Objective – Identify the components of a strategic plan and how it affects capital and operating budgets.
- d. Competency – Manage Administrative Systems
- i. Testing Objective – Identify the components of an effective performance evaluation system.
- e. Competency – Program Development and Management
- i. Testing Objective – Identify the characteristics of Best Management Practices (BMPs)
  - ii. Testing Objective – Identify the components of a successfully created program.

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## **2. Category – Regulatory and Programmatic Systems**

- a. Competency – Document Compliance with Environmental, Safety, Labor Regulations and Laws
  - i. Testing Objective – Identify activities that can lower insurance rates.
  - ii. Testing Objective – Identify information that should be included to document training meetings.
  
- b. Competency – Conduct Safe Operation
  - i. Testing Objective – Given a Safety Data Sheet, identify information about the Safety Data Sheet.
  - ii. Testing Objective – Given a chemical label, identify the required PPE (Personal Protective Equipment).
  - iii. Testing Objective – Given a scenario about a safety issue, identify the course of action that should be followed.
  - iv. Testing Objective – Identify the steps to administer CPR.
  - v. Testing Objective – Identify the most frequent types of workplace injuries.
  
- c. Competency – Develop a Crisis Management Plan
  - i. Testing Objective – Identify components of a written crisis management plan.

## **3. Category - Project Management**

- a. Competency – Development and Implement a Long-Range Master Plan
  - i. Testing Objective – Given a scenario about course renovations, estimate resources needed (staff, equipment, materials, time and money).
  - ii. Testing Objective – Identify the purpose and components of long-range master plans.
  
- b. Competency – Develop and Manage Projects



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- i. Testing Objective – Identify the amount of time, key objectives and resources needed to complete any project or prepare a project schedule.
- ii. Testing Objective – Given a scenario, identify the need for construction and renovation projects.

**4. Category - Human Resources**

- a. Competency – Hire and Terminate Staff
  - i. Testing Objective – Explain why it is important to develop a staged termination policy, including appropriate steps for disciplinary process.
- b. Competency – Manage Staff
  - i. Testing Objective – Identify common human relations problems.

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## Exam Sample Questions

Below are twelve sample questions from the Principles of Golf Course Business exam. These exact questions will not appear on the exam. However, they will provide exam takers an idea on what to expect regarding the format of the questions and the level of difficulty.

### Question 1

A golf course needs to purchase a new rough mower. It has received the following bids:

Mower A		Mower B
\$60,000	Purchase Cost	\$45,000
96 inch	Width of cut	72 inch

Both mowers have anticipated life cycles of 5 years and a residual value of \$20,000. Using Mower A, an operator can cut all the roughs one time in eight hours. Using Mower B requires 12 hours to cut the same area. Roughs are cut twice a week, 52 weeks a year. The operator's salary is \$10 per hour, and the maintenance and fuel costs for both mowers is the same at \$600 per year.

Disregarding the discount rate of the investment, which mower would be a better value and why?

- a. Mower B because of savings in capital cost and labor
- b. Mower A because maintenance and fuel costs are lower
- c. Mower A because the operating costs are less over the 5-year period
- d. Mower B because annual operating costs are the same as mower A, but the initial cost is cheaper

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Question 2

Given the balance sheet:

Current	Budget	Variance	Revenues
487,115	484,974	2,141	DUES
208,948	171,346	37,602	GOLF OPERATIONS
166,522	162,872	3,650	FOOD SALES
89,874	79,130	10,744	BEVERAGE SALES
116,348	82,673	33,675	F&B OTHER SALES
92	28	64	LOCKER ROOM
1,068,899	981,023	87,877	<b>Total Revenues</b>
229,699	191,530	(38,169)	<b>Total Cost of Sales</b>
553,194	537,505	(15,689)	<b>Total Payroll</b>
353,972	334,587	(19,385)	<b>Total Operating</b>

What is the percentage of variance on total revenues?

- a. 8%
- b. 9%
- c. 22%
- d. 83%

Question 3

You are asked to place an order of seed for overseeding. You need to apply 600 lbs. of seed per acre and have 30 acres to overseed. Each bag contains 50 lbs. of seed, and each pallet holds 50 bags. The company offers seed by the half pallet. You have no other seed available in inventory at the shop.

How many pallets should you order to give you just enough seed?

- a. 6.5
- b. 7
- c. 7.5
- d. 8

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Question 4

Over the golf season, your operating budget shows a variance (excess) in labor but a near equivalent savings in fertilizer and chemical.

What is the best way to approach this problem?

- a. Shuffle expenses from ledger to ledger to best match your forecast.
- b. Keep both ledgers as they were; they balance each other out next time.
- c. Accurately record the actual expenses where they occur to better forecast next year.
- d. Next season pad increase your labor forecast by the difference; do not report any fertilizer savings.

Question 5

Which description is a characteristic of a capital budget?

- a. Salaries
- b. Lease payment
- c. Acquisition of assets
- d. Expenses of operation

Question 6

With regards to Best Management Practices (BMPs) in IPM, which three are the most appropriate when selecting chemicals? (Choose three.)

- a. Price
- b. Toxicity
- c. Group rotation
- d. Formulation
- e. Ease of use
- f. Brand loyalty

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Question 7

To create an effective hiring program, what is the most important factor when determining wages for your employees?

- a. Commuting distance
- b. Regional cost of living
- c. Extent of responsibility
- d. Years of experience

Question 8

What is an important reference to include in equipment safety training?

- a. Course layout
- b. Former operators
- c. Operator's manual
- d. Manufacturer's specifications

Question 9

**Reference the MATCHPOINT SDS at the end of this guide to answer this question.**

Which three personal protective equipment (PPE) options are required by a MatchPoint Insecticide label? (Choose three.)

- a. Dust mask
- b. Long pants
- c. Leather gloves
- d. Long sleeve shirt
- e. Nitrile rubber gloves

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Question 10

Given this excerpt from the Chemical Safety Label:

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are barrier laminate and Viton. If you want more options, follow the instructions for category G on an EPA chemical-resistance category selection chart.

Applicators using ULV cold foggers or fog/mist generators in indoor space must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks, and
- Chemical-resistant headgear, if overhead exposure.

Applicators using ULV cold foggers and/or fog/mist generators in outdoor spaces must wear:

- Long-sleeve shirt and pants,
- Shoes plus socks, and
- Chemical-resistant gloves.

All other mixers, loaders, applicators, and other handlers must wear:

- Long-sleeve shirt and pants,
- Shoes plus socks, and
- Chemical-resistant gloves for all handlers except for applicators using motorized ground equipment,
- Chemical-resistant apron for mixers/loaders, persons cleaning equipment, and person exposed to the concentrate and for handlers performing animal dip applications.

Which three pieces of personal protection equipment for this specific chemical are necessary if you are the applicator and are not using a fogger? (Choose three.)

- a. Goggles
- b. Long pants
- c. Shoes with socks
- d. Long sleeve shirt
- e. Chemical resistant apron for applicator

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Question 11

A golf club receives a phone call from a member on the seventh hole stating that a fellow member is having a medical emergency.

What is the first thing to do to activate your emergency response plan for this situation?

- a. Call 911
- b. Contact Security
- c. Perform First Aid
- d. Notify the General Manager

Question 12

A golf club decides to buy a new greensmower for \$25,000. The club chose to pay \$10,000 down and then make three annual cash payments of \$6,000 each.

How much interest will the club pay over the three years of payments?

- a. \$0
- b. \$3,000
- c. \$6,000
- d. \$7,000

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Answers to Sample Questions

1. C
2. B
3. C
4. C
5. C
6. B, C, D
7. B
8. C
9. B, D, E
10. B, C, D
11. A
12. B



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### Recommended Resources

The following resources will be beneficial in preparing for the exam. These resources are not the sole source of exam content. Practical work experience is recommended to successfully complete the exam.

#### GCSAA On-Demand Webinars

*GCSAA continues developing content to support the Principles of Golf Course Business Exam. For the most current listing and to access webinars, visit [GCSAA's Learning Hub](#) and select category ASCS Prep*

Duties at the Desk: Purchasing and Budgets

Workplace Harassment: What has the last 12 months taught us?

#### Other Resources

ASGCA, *Master Planning for Golf Courses*

Audubon International, *Audubon Cooperative Sanctuary Program for Golf*

Balanced Scorecard Institute, *Strategic Planning Basics*

Carpenter, Mason and Bauer, Talya, *Principles of Management*

Centers for Disease Control, *Fatal Injuries Among Grounds Maintenance Workers, United States, 2003-2008*

Christians, Nick E. and Agnew, Michael L., *The Mathematics of Turfgrass Maintenance*

Clift, Wallace "Tinker," *How to: Renovate a Sand Bunker*

Daniels, John, *Does Your Chemical Storage Facility Make the Grade?*

Dow AgroSciences, Safety Data Sheets

eFileCabinet, *OSHA Training: What Needs to be Documented?*

Environmental Protection Agency, *Introduction to Integrated Pest Management*

GCSAA, *Best Management Practices Planning Guide*

GCSAA, *Emergency Response Plan for Fire in the Maintenance Facility*

Golfcourseagronomics.com, *Calculations*

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Golf Course Industry, *2016 State of the Industry Report - Budget*

Goltz, Jay, *Do the Math! The Real Cost of Overtime*

Hartwiger, Chris, *Help Your Bunkers Make the Grade*

Howard, Kelly, [OSHA/CalOSHA Overview](#)

Hurdzan, Michael J., *Golf Course Architecture: Evolutions in Design, Construction, and Restoration Technology*

Inside Golf, *How Golf Cart Paths can Increase Your Club's Membership Returns*

McCarty, L.B., *Best Golf Course Management Practices*

Miller, John, *Tournament Management: A Superintendent's Guide to Preparing a Golf Course for Competition*

Milligan, Robert A. and Maloney, Thomas R., *Human Resource Management of Golf Course Superintendents*

Moore, James F., *The Money Pit*

National Leasing, [6 Advantages of Leasing Golf Course Equipment](#)

O'Brien, Patrick, *Return of the Triplex*

Occupational Safety and Health Administration, *Training Requirements in OSHA Standards*

Previdi, Jeanette, *Emphasize Calling 911 When an Emergency Occurs*

Province of Alberta, *Pesticide Sales, Handling, Use and Application Regulation*

Rice, Kathy, *Fuel Efficiency of Golf Course Mowing Equipment*

Schmigdall, Raymond S., *Superintendent's Handbook of Financial Management*

[STMA.org](#)

Toro Groundskeeper Service Manual

University of Washington, *Learn CPR in Three Steps*

USGA Green Section, *Dollars and Sense: Making It in a Tough Economy*

WD-40 Company, Safety Data Sheet

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Wikipedia, *Buyer Decision Process*

Witteveen, Gordon and Bavier, Michael, *Practical Golf Course Maintenance: The Magic of Greenkeeping*