

ACCOUNTING EMPLOYER NEEDS ASSESSMENT REPORT

ISSUES

Financial services occupations are anticipated to have significant growth over the next decade due to business expansion and replacement needs. Accountants and Auditors are projected to have a 13% growth in job openings nationally through 2022. Likewise, bookkeepers, accounting, and auditing clerks are projected to have 11% growth (U.S. Bureau of Labor Statistics).

In a survey conducted by Monster.com in 2012 (Monster.com, 2012. Financial Services 2012 Job Conditions: insights and analysis from professionals, recruiters, and hiring managers), the following were listed as the top 20 financial services job titles and account for nearly one half (48%) of financial service opportunities.

Monster.com Job Posting Titles

- | | |
|---------------------------|---------------------------------|
| 1. Sr. Accountant | 11. Accounts Receivable Clerk |
| 2. Staff accountant | 12. Tax Manager |
| 3. Financial Analyst | 13. Payroll Clerk |
| 4. Accounts Payable Clerk | 14. Auditor |
| 5. Accountant | 15. Medical Billing Clerk |
| 6. Bookkeeper | 16. Finance manager |
| 7. Accounting Clerk | 17. Sr. Tax Accountant |
| 8. Accounting Manager | 18. Financial Reporting Manager |
| 9. Sr. Financial Analyst | 19. Financial Consultant |
| 10. Controller | 20. Bill Collector |

Local labor data projections in the accounting field mirror the national trend. Through 2017, it is anticipated that 4,499 positions will be created in this field in the local area, which includes San Mateo San Francisco, Contra Costa, Marin, Alameda, and Santa Clara Counties. Annual openings for specific job categories are:

Position	<i>Annual Projected Openings through 2017 for San Mateo, San Francisco, and Marin</i>
Information and Record Clerks	2,566
Bookkeeping, Accounting, and Auditing Clerks	557
Financial Clerks	1,174
Bills and Account Collectors	202
Financial Specialists	197

Source: The Economic Modeling Specialists Incorporated (EMSI) database

ASSESSMENT PROCESS

Our effort to understand entry-level accounting needs in San Mateo County began with labor market data. An internal work group comprised of faculty and deans from accounting-related fields at all three Colleges analyzed data and met to discuss accounting labor market needs. Given the complexity of data, we chose a multistage approach to our assessment:

1. Interviews with leading accounting staffing agencies:
 - a. Account Temps/Robert Half
 - b. Accounting Principals
 - c. Kelly Staffing
2. Informal survey of 40 small businesses in San Mateo County: An online survey tool was distributed to employers through the San Mateo County Chambers of Commerce, the San Mateo Economic Development Growth Enterprise (EDGE), San Mateo County Economic Development Association (SAMCEDA), and the CalCPA Association.
3. Scan of local job ads: A scan of 115 local job ads for entry-level accounting positions was completed in February/March, 2014. Eight positions were researched, including: AP Clerk; Accountant; Bookkeeper; Accounting Clerk; AR Clerk; Payroll Clerk; Accounting Assistant; and Office Manager

Through surveys, interviews, and job ad scans, the accounting workgroup sought to understand:

- Educational requirements for entry-level occupations
- Entry-level job skill requirements
- Current and future software demands within the accounting field
- The perceived value of internships
- Possible course modifications or certificate offerings of value to business

FINDINGS FOR THE COLLEGES

Placement Agency Interview Findings

The top three job placement agencies in San Mateo County were interviewed regarding industry standards with regard to entry-level hiring needs.

- Required degrees:
 - ✓ Small companies: All agencies interviewed stated that small companies are more flexible with degree requirements than medium-to-large companies. They typically hire candidates with accounting backgrounds and QuickBooks experience who come with personal referrals. They prefer a degree but will waive the requirement for a candidate who is trustworthy, flexible, will grow with the company, and fits the company culture. Placement agencies believe that public accounting and/or small business accounting courses help candidates find employment in small businesses.
 - ✓ Medium-to-large companies: Education requirements are generally stringent. According to all agencies interviewed, medium-to-large sized companies seek applicants with four-year accounting degrees plus experience. Publicly traded companies and those with compliance requirements also require four-year degrees. Medium or large companies would consider a candidate with a four--year degree that is not in Accounting/Finance if the candidate had applicable experience in a financial institution.
- Perceived value of internships: There was no consensus among those interviewed on the value of internships. One participant commented that internships with CPAs or tax firms may not be useful because they are often limited to data entry roles. In general, most believed that experience on specific projects can add to a resume but do not substitute for work experience.

- Required entry-level skills:
 - ✓ Accounts receivable
 - ✓ Collections
 - ✓ Payables
 - ✓ Month end close
 - Understand bank statements and balance checks
 - Reconcile to the General Ledger
 - ✓ Accounts Payable/Accounts Receivable (AP/AR)
 - ✓ Journal ledger entries
 - ✓ Bank reconciliation
 - ✓ Knowledge of Generally Accepted Accounting Principles (GAAP) processes. These are rules accountants follow when preparing financial statements.
 - ✓ Invoices
 - ✓ Full cycle accounts receivable/payable

- Software most requested: The following is a list of software that employers request job candidates to know.
 - ✓ QuickBooks is a baseline requirement
 - ✓ Advanced Excel skills
 - Financial Modeling
 - Regressions
 - Macro building
 - Handling multiple spreadsheets
 - Pivot tables, H and VLOOKUP
 - Link multiple worksheets
 - Averages, Sums, Sort, Counts, Sumifs, Countifs
 - Standard Deviations
 - Transpose Functions
 - Special Copying and pasting functionalities
 - Histograms
 - All kinds of charts (especially bars, pies, columns, dispersion)
 - ✓ Oracle 12R
 - ✓ NetSuite cloud based applications
 - ✓ Dynamics AX
 - ✓ Dynamics GP, formerly Great Plains
 - ✓ Sales Force
 - ✓ Peach Tree
 - ✓ Mass 90
 - ✓ Paycheck

- Common entry-level job titles: Common entry-level job titles that community college graduates could be eligible for include: Junior Accountant; Data Entry Clerk; General Ledger Accountant; and Staff Accountant.

- Requested curriculum content: Placement agencies stated that the following curriculum should be covered by the Colleges:
 - ✓ QuickBooks
 - ✓ NetSuite
 - ✓ AP/AR and reconciliation are more important than payroll and purchasing
 - ✓ Reconciliation of operations, accounts, and checkbooks
 - ✓ Financial Statement construction.

- Workplace Readiness: Placement agency representatives indicated that “workplace readiness” (i.e., work ethic, showing up on time, appropriate dress, workplace communications skills, etc.) is lacking in community college graduates. They emphasized the need for candidates to have sophisticated resumes with accurate dates, good references, and no typos. They also advised candidates to research the company they are applying to and to be prepared for situational questions.

Informal Survey of San Mateo County Small Business

Our informal survey of 40 San Mateo County employers validated the placement agency interviews. The majority of respondents were from small companies with 99 employees or less that represent professional and technical services, finance/insurance, and other business types.

Of those surveyed, the primary financial role under the CEO/Owner is either a CFO, business manager, or some other position related to finance or operations. Entry-level positions in accounting tend to be Bookkeepers, Office Managers, Accounting Managers, or Junior Accountants. In a small business, most employees fulfill multiple roles. More than half of the respondents stated that employees in a small business need to fill customer service, human resource, and sales roles in addition to finance.

As placement agencies noted, small businesses surveyed believe financial accounting experience is the most desired job qualification. They were split equally between their perceived value of an AA versus BA degree. The majority (55%) of respondents said that they have made exceptions to the degree requirement for: 1) specialized accounting experience; 2) a referral from a trusted source; or 3) an internal promotion.

When asked about the most important job skills an applicant can offer, small businesses survey respondents valued: 1) the ability to work as part of a team; 2) financial technical competence/experience or education; and 3) interpersonal communication skills. These responses were consistent with the placement agency interviews.

Survey respondents believe that a general AA degree in accounting is valuable. The most desired certificate programs for entry-level employees are: 1) Bookkeeper; 2) Tax Preparer; and 3) Compliance Officer. The Colleges offer both Bookkeeper and Tax Preparer certificates but not Compliance Officer because compliance issues and auditing varies greatly by industry. Most compliance positions require a baccalaureate degree and/or industry specific certification.

Regional Job Ad Scan

A scan of 115 local job ads was conducted in February/March 2014 for the following skill sets: AP Clerk; Accountant; Bookkeeper; Accounting Clerk, AR Clerk; Payroll Clerk; and Accounting Assistant; and Office Manager.

This job ad scan revealed that companies are flexible regarding degree requirements for Bookkeepers, Accounts Receivable Clerk, Payroll Clerk, Accounting Clerks, Accounting Assistants, and Office Managers.

IMPACT ON DISTRICT PROGRAMS

The data summarized above was extensively discussed by faculty and deans in the accounting area and the assessment has resulted in creation of two new College offerings to address the accounting needs of our regional businesses. The assessment effort has also inspired a new Districtwide effort, through a Districtwide Advisory Committee on Accounting to enhance accounting offerings.

New College Offerings

Based on assessment findings, Cañada College has added: 1) a new Payroll Specialist Certificate of Achievement (18 units) and; 2) a new Professional Bookkeeping Preparation class. Both have been approved by the College Curriculum Committee and will be offered at Cañada College in Fall, 2014. Descriptions of both offerings are attached.

Districtwide Accounting Advisory Committee To Focus on Internal Improvements

Faculty and deans from the three Colleges greatly valued the opportunity to collaborate with colleagues across the District and indicated a desire to continue this collaboration in order to assure that the Colleges are offering the right programs that benefit students and local employers. They discussed formation of a Districtwide Accounting Advisory Committee (rather than three College committees) as a means to continue the collaboration and the work of regularly analyzing and updating course offerings, Certificates of Achievement and degrees. Some of the discussion items suggested for the Districtwide Advisory Committee meetings could be:

- Development of multi-campus course offerings that utilize distance-learning technology.
- Coordinate and streamline the QuickBooks course content among the Colleges.
- Create a common numbering system for accounting courses offered at all three Colleges.
- Develop an optional .5 unit work flow practice set for students to simulate on-the-job training.
- Research Great Plains and Solomon software for Districtwide student use
- Develop an honors accounting program. Common standards will be developed with a pilot program at Cañada College for transfer programs.
- Discuss the requirement of additional Excel skills specific to accounting for College programs.

Cañada College

Accounting 250 Official Course Outline

1. **COURSE ID:** ACTG 250 **TITLE:** Certified Bookkeeper AIPB Preparation
Semester Units/Hours: 3.0 units; a minimum of 48.0 lecture hours/semester
Method of Grading: P/NP Only
Prerequisite: ACTG 121, and ACTG 180 ACTG 200

2. **COURSE DESIGNATION:**

Degree Credit
Transfer credit:
CSU

3. **COURSE DESCRIPTIONS:**

Catalog Description:

Certified Bookkeeper Preparation class in order to take the AIPB examination. Topics covered during the preparation course include accruals, deferrals, and adjusted trial balance, correction of accounting errors and bank reconciliations, handling payroll, calculating depreciation and recording and valuating merchandise inventory. Two of the examinations for certification must be completed at a Testing Center. In addition to participating in in-depth instructional sessions, students complete personal-study workbooks outside of class and the CB examinations during the course.

Schedule of Classes Description

Certified Bookkeeper Preparation class in order to take the AIPB examination. Topics covered during the preparation course include accruals, deferrals, and adjusted trial balance, correction of accounting errors and bank reconciliations, handling payroll, calculating depreciation and recording and valuating merchandise inventory. Two of the examinations for certification must be completed at a Testing Center.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**

Upon successful completion of this course, a student will meet the following outcomes:

1. Prepare the trial balance, compute and record all end-of-period adjustments and present the adjusted trial balance.
2. Analyze and create the monthly bank reconciliation and move on to uncovering and correcting errors in the trial balance and in the accruals and deferrals.
3. Compute and record depreciation for book and tax purposes; the 4 major methods of GAAP depreciation; MACRS depreciation for tax purposes, including Section 179 deductions; and tax depreciation for cars, SUVs and other vehicles.
4. Prepare a strategy to control cash and assets; prevent—or spot—employee theft, customer check and credit-card fraud, and Internet scams.
5. Discuss the perpetual and periodic methods of recording inventory. Calculate methods of inventory cost methods and record cost of goods sold using weighted and moving average, FIFO, LIFO and lower of cost or market
6. Prepare and analyze a payroll register and payroll process. Differentiate between wages and salaries, calculate payroll deductions and contributions. Process a W-4 and complete the 941, 940, W-2 and W-3.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**

Upon successful completion of this course, a student will be able to:

1. Analyze variances and correct errors in the General Ledger and journal entries.
2. Prepare month end adjusting entries.
3. Calculate payroll and the complete the Federal and State California forms required.
4. Calculate depreciation entries using a variety of methods: straight-line depreciation, units

of production depreciation, declining balance method, sum of the years digits, and depreciation for tax purposes (MACRS).

5. Calculate inventory valuation using the following methods: specific item, Last In First Out (LIFO), First In First Out (FIFO), and weighted average.
6. Identify internal controls necessary for fraud prevention.

6. COURSE CONTENT:

Lecture Content:

1. Certified Bookkeeper Program
 - A. Eligibility Requirements
 - B. Testing Program
 - C. Code of Ethics
 - D. Maintenance of Certification
2. Accruals, Deferrals, and the Adjusted Trial Balance
 - A. Why Accruals, Deferrals, and Other Adjustments are Made
 - B. Accruing Revenues and Expenses
 - C. Recognizing Revenues Collected in Advance
 - D. Recognizing Expenses After a Prepayment
 - E. Other Adjusted Entries
 - F. Unadjusting Trial Balance Through the Adjusted Trial Balance
3. Correction of Accounting Errors and the Bank Reconciliation
 - A. When and Where Accounting Errors Occur and How They Are Discovered
 - B. Performing the Bank Reconciliation
 - C. Finding and Correcting Errors on the Unadjusted Trial Balance
 - D. Correcting Current-Period Accrual and Deferral Errors
4. Payroll
 - A. How to Pay Different Types of Employees
 - B. Federal and State Wage-Hour Law
 - C. Paying Employees Under Federal Law
 - D. Employment Records and Payroll Recordkeeping
 - E. Form W-4 and Comparable State Forms
 - F. Withholding and Depositing Federal Taxes
 - G. Federal Employment Reporting Forms and Due Dates
 - H. When Wages Become Taxable
 - I. Other Reporting Rules
 - J. Payroll Register and Journal Entries
5. Depreciation
 - A. The Difference Between Book and Tax Depreciation
 - B. Depreciation under GAAP
 - C. Computing and Allocation Depreciation
 - D. Depreciation Under Federal Tax Depreciation Rules
 - E. Tax Depreciation of Vehicles
6. Inventory
 - A. General Concepts of Accounting for Inventory
 - B. The Perpetual Method
 - C. The Periodic Method
 - D. Weighted-Average and Moving-Average Methods
 - E. First-In, First-Out (FIFO) Method
 - F. Last-In, First-Out (LIFO) Method
 - G. Lower of Cost or Market LCM Rule
7. Internal Controls and Fraud Depreciation
 - A. How to Prevent or Spot Theft of Inventory and Other Non-cash Assets by Employees
 - B. Preventing Employee Theft, Embezzlement, or Fraud by Hiring the Right Personnel
 - C. Insuring the Company Against Theft
 - D. How to Prevent or Spot Customer Check Fraud
 - E. Signs that May Indicate Payroll Fraud

- F. How to Prevent or Spot Customer Credit Card Fraud
- G. Recommended Rules for Company Credit Cards
- H. Preventing Vendors From Cheating the Company

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Discussion
- C. Guest Speakers

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

- Students will be required to answer case studies in paragraph form on a weekly basis. These cases are at the end of each topic session; the majority of writing focuses on internal controls and fraud prevention.
- Topics included in the 6 textbooks will be required. Each week one chapter will be assigned, approximately 15 to 20 pages. Case studies will be provided by the professor and these cases are approximately 5 pages.

Reading Assignments:

- Topics included in the 6 textbooks will be required. Each week one chapter will be assigned, approximately 15 to 20 pages. Case studies will be provided by the professor and these cases are approximately 5 pages.

Other Outside Assignments:

- None

To be Arranged Assignments (if applicable):

- Not applicable

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Class Performance
- C. Class Work
- D. Exams/Tests
- E. Homework
- F. Quizzes
- G. For two sections of the AIPB examination the students will be required to use a Prometric Center.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. ExamReview. *Uniform Bookkeeper Certification Exam ExamFOCUS Study Notes & Review Questions 2013*, ed. CreateSpace Independent Publishing Platform (February 3, 2013), 2013

Possible manuals include:

- A. American Institute of Professional Bookkeepers. Mastering Correction of Accounting Errors, AIPB, 01-01-2013
- B. American Institute of Professional Bookkeepers. Mastering Inventory, AIPB, 01-01-2013
- C. American Institute of Professional Bookkeepers. Mastering Internal Controls and Fraud Prevention, AIPB, 01-01-2013
- D. American Institute of Professional Bookkeepers. Mastering Depreciation, AIPB, 01-01-2013
- E. American Institute of Professional Bookkeepers. Mastering Adjusting Entries, AIPB, 01-01-2013

Cañada College

PAYROLL SPECIALIST: Certificate of Achievement

Payroll Specialists require specific bookkeeping/accounting/payroll training and current computer technology including word processing and spreadsheet programs. The specialist will perform a wide variety of record keeping and payroll processing activities, including computing wage and overtime payments, calculating and recording payroll deductions, processing requests for paycheck advances, and processing terminations.

Career Opportunities:

Assistant Payroll Clerk, Payroll Clerk

Program Learning Outcomes:

Upon Completion of Certificate requirements, students will be able to:

- Design and manage business documents using current technology to engage in creative problem solving.
- Communicate an understanding of business concepts professionally through written, oral and visual presentations using current technology.
- Recognize ethical behavior in their chosen profession and behave in a socially responsible manner. Analyze business issues, interpret financial data and identify economic trends.

Complete Core Courses, 15 units

Units

ACTG	100	Accounting Procedures	3
ACTG	180	Payroll and Business Taxes	1.5
ACTG	200	QuickBooks	3
BUS.	103	Introduction to Business Information Systems	3
CBOT	435	Spreadsheets	3
CBOT	470	Advanced Spreadsheets	1.5

Selective Courses: choose 3 units from the following:

BUS.	101	Human Relations in Business	3
		or	
MGMT	204	Managing Employees Effectively	3
Total Units			18