



COURSE OUTLINE

SECTION I: BASIC COURSE INFORMATION

1. **COLLEGE:** Pierce
2. **SUBJECT (DISCIPLINE) NAME**¹ (40 characters, no abbreviations): Math
3. **COURSE NUMBER:** 238
4. **COURSE TITLE:** Calculus for Business and Social Science I
5. **UNITS:** 5.00
6. **CATALOG COURSE DESCRIPTION** -- Provide a description of the course, including an overview of the topics covered:

An introduction to the study of calculus of one variable, differentiation and integration of algebraic and exponential functions, application of differential calculus to modeling and curve sketching, use of integral calculus to determine areas between curves, techniques of integration. Topics of finite mathematics including compound interest and annuities.

7. **CLASS SCHEDULE COURSE DESCRIPTION** -- Provide a brief description of the course, including an overview of the topics covered:

An introduction to the study of calculus of one variable, differentiation and integration of algebraic and exponential functions, application of differential calculus to modeling and curve sketching, use of integral calculus to determine areas between curves, techniques of integration. Topics of finite mathematics including compound interest and annuities.

8. **COLLEGE APPROVAL DATE:**

9. **UPDATES** (check all applicable boxes):

- | | |
|--|-----------------------------------|
| <input checked="" type="checkbox"/> Content | Last Update: Jan. 17, 2005 |
| <input checked="" type="checkbox"/> Objectives | Last Update: Jan. 17, 2005 |
| <input type="checkbox"/> College Specific Course Attributes/Data Elements | Last Update: |
| <input type="checkbox"/> Districtwide Course Attributes/Data Elements | Last Update: |
| <input type="checkbox"/> Other (describe) | Last Update: |

10. **CLASS HOURS:**

	Hours per week (based on 18 weeks)	Total Hours per term (hrs per week x 18)	Units
Lecture:	5.00	90.00	5.00
Lab/activity (w/ homework):			
Lab/activity (w/o homework):			
Total:	5.00	90.00	5.00

¹ Underlined course attributes are the same for the course throughout the LACCD; all other course attributes are college specific.

Note: The Carnegie Rule and Title 5, section 55002 sets forth the following minimum standards: 1 unit = 1 hour lecture per week, 2 hours homework per week; **OR** 2 hours per week of lab with homework; **OR** 3 hours of lab per week without homework. The hours per week are based on a standard 18-week calendar. Lecture also includes discussion and/or demonstration hours, laboratory includes activity and/or studio hours.

11. PREREQUISITES, COREQUISITES, ADVISORIES ON RECOMMENDED PREPARATION, and LIMITATION ON ENROLLMENT

Note: The LACCD's *Policy on Prerequisites, Corequisites and Advisories* requires that the curriculum committee take a separate action verifying that a course's prerequisite, corequisite or advisory is an "appropriate and rational measure of a student's readiness to enter the course or program" and that the prerequisite, corequisite or advisory meets the level of scrutiny delineated in the policy.

Prerequisites: **Yes** (If yes, complete information below)

Subject	Number	Course Title	Units	Validation Approval Date (for official use only)
Math	125	Intermediate Algebra	5	
Math	126	Intermediate Algebra with Trigonometry	6	
Intermediate Algebra Math Placement Test				

Corequisite: **None** (If yes, complete information below)

Subject	Number	Course Title	Units	Validation Approval Date (for official use only)

Advisories: **Yes** (If yes, complete information below)

Subject	Number	Course Title	Units	Validation Approval Date (for official use only)
Math	245	College Algebra	3	

12. OTHER LIMITATIONS ON ENROLLMENT (see Title 5, section 58106 and Board Rule 6803 for policy on allowable limitations. Other appropriate statutory or regulatory requirements may also apply):

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4. WRITING ASSIGNMENTS:

Title 5, section 55002 requires grades to be "based on demonstrated proficiency in subject matter and the ability to demonstrate that proficiency, at least in part, by means of essays or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students." Writing assignments in this course may include, but are not limited to the following:

Writing assignments in this course include, but are not limited to, problem solving exercises.

5. REPRESENTATIVE OUTSIDE ASSIGNMENTS:

Out of class assignments may include, but are not limited to the following:

6. REPRESENTATIVE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING:

Title 5, section 55002(a) requires that a degree applicable course have a level of rigor that includes "critical thinking and the understanding and application of concepts determined by the curriculum committee to be at college level". Critical thinking may include, but is not limited to analysis, synthesis, and evaluation. Provide examples of assignments that demonstrate critical thinking.

Writing assignments involve problem solving and analysis. For example: "The following data gives information on the public debt of the US for the years 1990-1993. Find the average rate of change of the public debt; give units and interpret your answer."

7. METHODS OF EVALUATION:

Title 5, section 55002 requires grades to be "based on demonstrated proficiency in subject matter and the ability to demonstrate that proficiency, at least in part, by means of essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students." Methods of evaluation may include, but are not limited to the following (please note that evaluation should measure the outcomes detailed "Course Objectives" at the beginning of Section II):

Methods of evaluation may include, but are not limited to, quizzes and exams, including a final exam; homework; computer projects; portfolios or journals

8. METHODS OF INSTRUCTION:

Methods of instruction may include, but are not limited to the following:

- Lecture
- Discussion
- Laboratory
- Activity
- Field Experience
- Independent Study
- Other (explain)

student presentations,
group work, computer labs
or computer-aided
instruction, videos