

# SANTA ANA COLLEGE

## CURRICULUM & INSTRUCTION COUNCIL

DATE: May 7, 2012

FROM: Bonita N. Jaros, Ph. D., Chair

TO: Curriculum & Instruction Council

RE: Minutes of Meeting of May 7, 2012  
2:00 pm, SAC Foundation Board Room, S – 215

Present: P. Canzona, J. Coffman, M. Colunga, B. Courter, S. Fondren, D. Gilmour, G. Giroux, P. Hughes, B. Jaros, D. Kanzler, B. Kehlenbach, L. Pedroza, M. Porter, K. Ross, S. Turner, D. Vu.

Guests: B. Miller, B. Sos.

1. MINUTES OF MEETING OF APRIL 23, 2012 APPROVED
2. TECHNICAL COMMITTEE REPORT (See Attachment) APPROVED
3. CURRICULUM ITEMS (See Attachment) APPROVED
4. PROGRAM REVIEW/TLC REPORT INFORMATION
  - A. Bonnie told the council that she will send out the Program Review Guidelines document to the council for reference. In addition, at the Academic Senate meeting tomorrow, she will demonstrate how to incorporate Student Learning Outcomes on the Course Overview/ Syllabus from the Course Outline of Record.
  - B. The TLC has sent out the request to resubmit seven PA/PR reports by August 31, 2012. These will be reviewed at the first TLC meeting in the fall.
  - C. The TLC End-of-Year Report will be completed by mid-May. The report will summarize goals from the PA/PR reports received this semester.
  - D. The TLC needs a representative from the following curriculum committees for the next academic year 2012 – 2013: Social Sciences, Humanities, Human Services and Technology.
5. REPEATABILITY – BRIAN SOS INFORMATION

Brian Sos informed the council about the changes on repeatability that will be effective fall 2013. Bonnie recommended a Task Force for repeatability. The Task Force will bring this item to council and then the representatives from the council will present the information to the division curriculum committees. Items for discussion should include the new definitions of *family* and *courses levels*. Bonnie thanked Brian for his leadership.

6. OTHER

INFORMATION

A. Counseling has submitted the TMI form for Counseling 116. TMI forms are required for any course that might be offered in a distance mode. The form may be obtained on CurricUNET under "Supplemental Forms."

B. Bonnie updated the council on the plan for planting a tree in memory of faculty member Kesha Hondo. The Facilities Committee is cognizant of this and is working on including this tree in the master plan.

C. The complete Program Review Handbook is being developed by Bonnie and Dr. Rose and will be forthcoming in the fall.

D. Bonnie announced that this C&I Council meeting will be the last meeting for her as chair. All the council members applauded her to say farewell to Bonnie for all her hard work and dedication of 20 years. Bonnie "passed the gavel" to Monica Porter, the new Curriculum and Instruction Council Chair beginning fall 2012.

We wish all our colleagues a happy and healthy summer! From: Bonnie, Monica, Anh-Phuong, Tina, Kay, and Huong.

**The next meeting is Monday, August 27, 2012 at 2:00 p.m., SAC Foundation Board Room, S – 215.**

**COURSE DELETION**

*Items #1 through #14 were approved.*

**Fine and Performing Arts**

1. Art 183, Beginning Stained Glass
2. Art 186, Intermediate Stained Glass
3. Photography 010, Intermediate Photography Lab
4. Photography 181A, The Zone System
5. Photography 181B, The Zone System
6. Photography 182A, Alternative Processes
7. Photography 182B, Alternative Processes
8. Photography 183A, Photo Graphics
9. Photography 183B, Photo Graphics
10. Photography 185A, Landscape Photography
11. Photography 185B, Landscape Photography
12. Photography 200, The View Camera
13. Photography 293, Color Photography
14. TV/Video Communications 113, Advanced Final Cut Pro

**REVISED COURSES**

*Items #15 through #32 were approved.*

**Counseling**

15. Counseling 110, University Transfer Research  
(Repeatability changed from R3 to NR)

**Fine and Performing Arts**

16. Art 150, Primitive Pottery Techniques  
(Classification code changed from I to A; Transfer code changed from 3 to 2; SAM code changed from E to D)
17. Art 185, Fundamentals of Cartooning and Storyboarding  
(Minor wording changed in the catalog description)
18. Dance 206B, Modern Dance II  
(Classification code changed from I to A)
19. Dance 209, Modern Dance III  
(Classification code changed from I to A)
20. Dance 210, Modern Dance IV  
(Classification code changed from I to A)
21. Music 101H, Honors Music Appreciation

- (Classification code changed from I to A)
22. Music 102, World Music  
(Classification code changed from I to A)
23. Music 102H, Honors World Music  
(Classification code changed from I to A; Transfer code changed from 3 to 2)
24. Music 110, Fundamentals of Music  
(Classification code changed from I to A)
25. Music 111, Basic Theory and Ear Training  
(Classification code changed from I to A)
26. Music 112, Theory 2  
(Classification code changed from I to A)
27. Music 213, Theory 3  
(Classification code changed from I to A)
28. Theatre Arts 100, Introduction to Theatre  
(Classification code changed from I to A)
29. Theatre Arts 167, Setup for Intelligent Lighting  
(Classification code changed from I to A; Repeatability changed from R1 to NR)

#### Continuing Education

30. English As A Second Language 120, ESL Civics  
(Minor wording changed in the catalog description)
31. English As A Second Language 530, American English Pronunciation  
(Minor wording changed in the catalog description)
32. English As A Second Language 570, Conversation 1  
(Minor wording changed in the catalog description)

#### **REVISED COURSES WITH SLO – NO CHANGE TO CATALOG AND CLASS SCHEDULE DESCRIPTION**

*Items #33 through #34 were approved.*

#### Continuing Education

33. English As A Second Language 510, VESL: English for Work 1
34. English As A Second Language 520, VESL: English for Work 2

**REVISED COURSE – FIRST READING**

*Items #1 through #8 were presented for first reading. Item #9 was deferred.*

**Fine and Performing Arts**

1. Art 196A, 3D Modeling Fundamentals
2. Art 197A, 3D Animation Fundamentals
3. Art 298, Art Practicum
4. Dance 130, Dance Improvisation
5. Dance 204A, Dance Production
6. Dance 204B, Dance Production
7. Dance 206A, Modern Dance I
8. Music 162, Class Piano II

**Continuing Education**

9. English As A Second Language 580, Conversation 2

**REVISED COURSE – SECOND READING**

*Items #10 was approved.*

**Human Services**

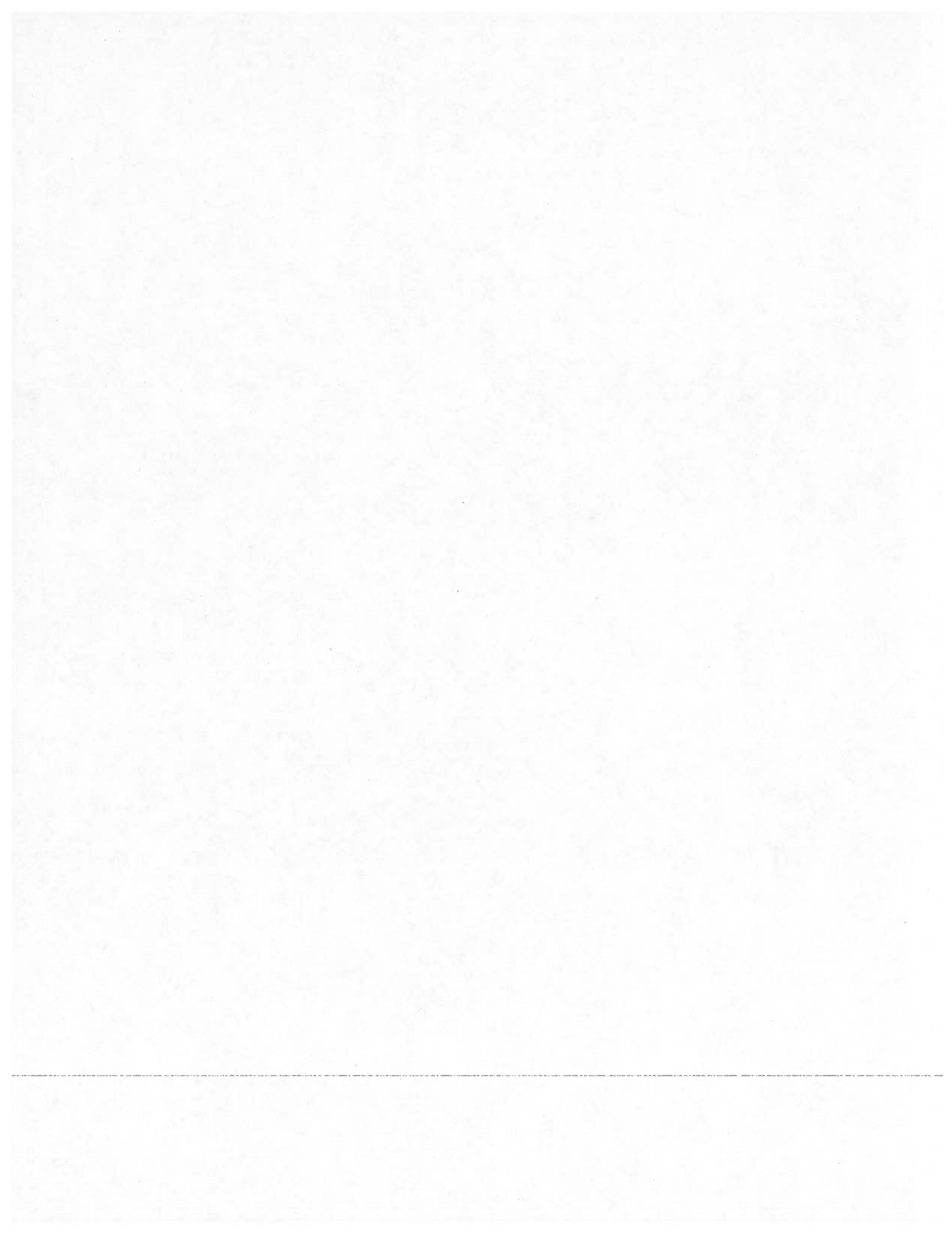
10. Fire Technology 121, Physical Fitness for Public Safety Personnel

**NEW PROGRAM – FIRST READING**

*Items #11 was presented for first reading. The rules for a second reading were suspended, and items #11 was approved.*

**Kinesiology**

11. Associate of Arts in Kinesiology for Transfer AA-T Degree (sac.kin.aat)



TECHNICAL COMMITTEE REPORT

AUGUST 27, 2012

**REVISED COURSES**

Science, Math and Health Sciences

1. Biology 179, Plants of Orange County  
(Repeatability changed from R3 to R2)

**REVISED COURSES WITH SLO – NO CHANGE TO CATALOG AND CLASS  
SCHEDULE DESCRIPTION**

Human Services

2. Culinary Arts 062, Basic Techniques of Cooking
3. Culinary Arts 066, Baking
4. Culinary Arts 070, Beverage Service
5. Culinary Arts 100, Introduction to Culinary Arts and Hospitality
6. Culinary Arts 145, Foods Presentation Pantry/Garde Manger

Humanities

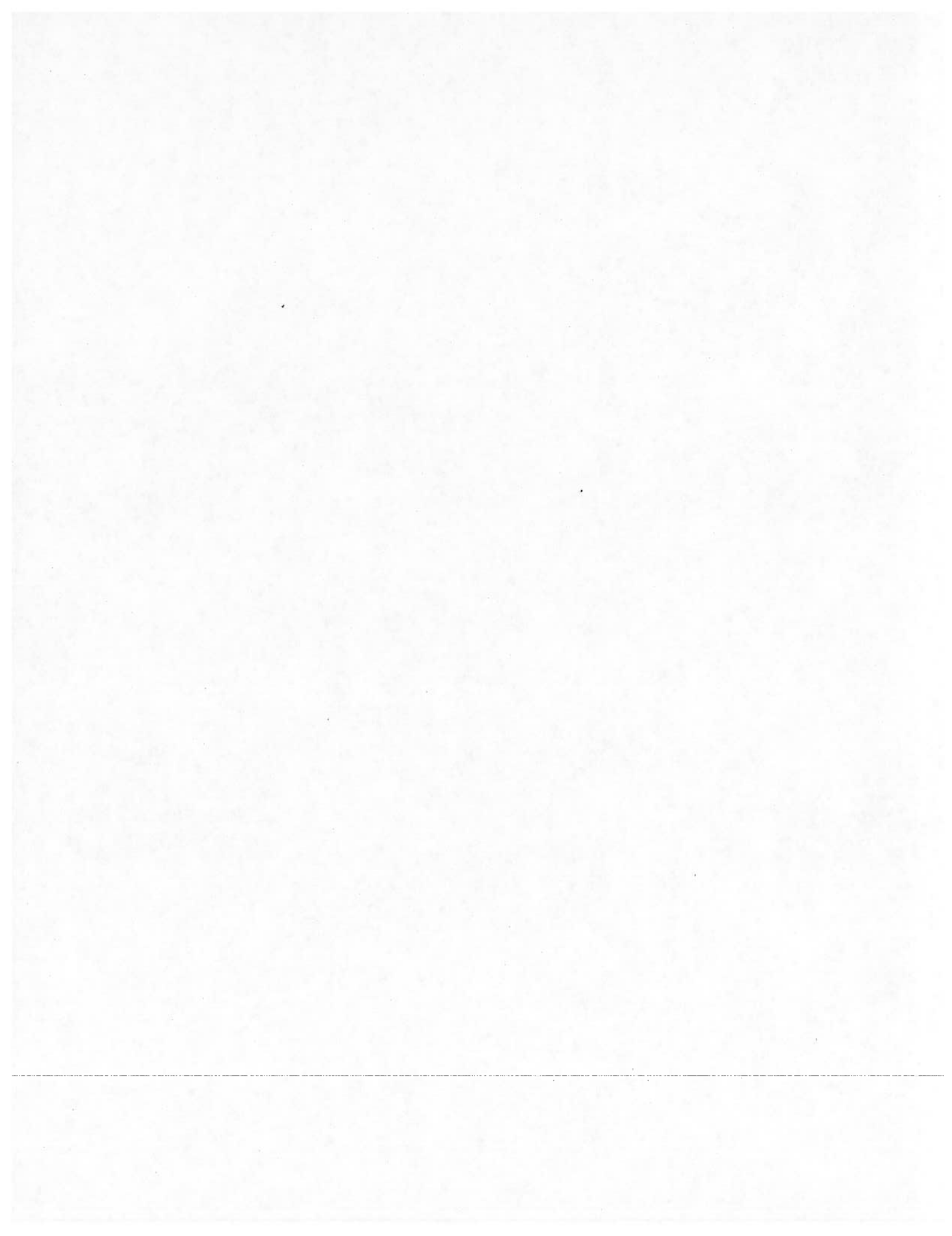
7. Anthropology 101L, Physical Anthropology Laboratory
8. Anthropology 104, Language and Culture
9. Anthropology 104H, Honors Language and Culture

Science, Math and Health Sciences

10. Biology 109, Fundamentals of Biology
11. Biology 109H, Honors Fundamentals of Biology
12. Biology 212, Animal Diversity and Ecology
13. Biology 214, Plant Diversity and Evolution

Continuing Education

14. High School Subjects 229, Skills for Success
15. High School Subjects – English 070, The Short Story





first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Biology 179, Plants of Orange County

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Biology	
Course Number	179	
Course Title	Plants of Orange County	
Former Title		
Units	2	
Lecture Hours	16	
Laboratory Hours	48	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>64</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

Plant identification and the conditions needed for optimum growth of local plants are presented. Focus is on identification and study of native wild plants in natural areas of Orange County, their place and importance to habitat, and their use in landscaping. Field trips are a major part of the course. Guest speakers may be called upon to enhance course content. Intended for biologists, park rangers, docents, native plant gardeners and other plant-lovers.

**Budget Unit**

<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	D - Possible Occupational
<b>Repeatability:</b>	<del>R3-R2</del> - Repeatable <del>x3-x2</del>
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 02/16/12 by: Jubal Hampton

Divison Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Requires the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. Also requires reading text and other assigned materials in preparation for class meetings, laboratory exercises and examinations. Completion of review questions, problems and/or workbook assignments. Emphasis on organizational skills, comparing and contrasting related concepts, recognition of significant structures, functions, behaviors, processes and interrelationships and application of principles to specific examples/problems. An objective evaluation of the students performance in the laboratory including punctuality, effectiveness of time obligations, participation in assigned laboratory exercises/field experiences and degree of preparation. ~~8 Weeks - Urban Plants Including Weeds - To identify about 90% of the plants in the Orange County urban environment. To know the optimum growth conditions for each. 8 Weeks - Native, Natural and Agricultural Plants - To identify 90% of the plants in the Salt Marsh, Coastal Sage Scrub, Chaparral, Riparian, Oak Woodland, Pine Forest and Agricultural Areas of Orange County. Also, a five to ten page report about any plant or group of plants that the student chooses is assigned; (e.g. Bromeliads, Turf; Eucalyptus, etc) Report compiled throughout the semester. Weeks 1 -~~

### 1. Geography and Topography of Orange County

(8 hours)

1. Identify on maps and in the field the major landforms of Orange County and understand how they influence wild plant distributions

### ~~Week 2 - Plant Morphology~~

1. (8 hours)

Understand

1. Plant Morphology - understand and recognize all plant parts important for the life of plants

### ~~Week 3 - Plant Identification methods~~

1. (8 hours)

Understand

1. Plant Identification methods - understand and utilize

many

1. different methods for the identification of plants

### ~~Week 4 - Practical Identification~~

1. (8 hours)

Identify

1. Practical Identification - identify the dominant species of plants encountered on all field trips

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

# 2

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Culinary Arts 062, Basic Techniques of Cooking

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Culinary Arts	
Course Number	062	
Course Title	Basic Techniques of Cooking	
Former Title		
Units	2	
Lecture Hours	16	
Laboratory Hours	48	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>64</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

Basic techniques and principles of food preparation are practiced in skill applied laboratory. (Same as Nutrition and Food 062.)

<b>Budget Unit</b>	<u>15714</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	C-Not transferable
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	D - Possible Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	130600 - Nutrition/Foods/Culinary Arts
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 06/19/12 by: Karen Warner

Divison Chair Approval Date: 06/26/12 by: Kristina Ross

Curriculum and Instruction Council Chair Approval Date:

COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

**Laboratory Organization and Procedures Lec 2/ Lab Hours 6**

Course overview and requirements. Laboratory procedures and responsibilities. Basic terminology. Efficiency and sanitation in dishwashing and preparation.

**Basic Preparation Techniques**

Measuring and recipes procedures

**Equipment Use**

Use and care of kitchen equipment

**Guidelines for the Selection and Storage of Quality Ingredients**

**Techniques and Procedures in the Preparation of:**

**Milk and Cheese Lec 2/ Lab 6**

**Eggs Lec 1.5/ Lab 4.5**

**Vegetables, Fruits, Salads Lec 2/ Lab 6**

**Fats and Oils Lec 1/ Lab 3**

Products made from or cooked in fats and oils

**Cereals and Starches Lec 1/ Lab 3**

**Baked Products Lec 2.5/ Lab 7.5**

Quick breads, yeast products, cakes and pastries

**Meats, Fish, Poultry Lec 3/ Lab 9**

**Crystallization Lec 1/ Lab 3**

Sugar and ice crystals, candy and frozen desserts

SANTA ANA COLLEGE PLAN OF INSTRUCTION

DISCIPLINE, NUMBER, TITLE: Culinary Arts 062, Basic Techniques of Cooking

(If the discipline, number or title is being revised, above should reflect the NEW information.)

**COURSE MATERIALS**

Required texts and/or materials. (Include price and date of publication.)

**Required: Freeland. *Understanding Food Principles and Preparation*, Fourth ed. Thomson/Wadsworth Publishing, 2010, ISBN: 9780023396410.**

**Required: Walter, M., J & Beathard, K., Lab Manual for Understanding Food, 4th, Thomson/Wadsworth, 06-09-2010**

**Recommended readings and/or materials: None**

**Time Life Series of Foods Around the World**

**Other:**

None

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

STUDENT LEARNING OUTCOMES

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Culinary Arts 066, Baking

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Culinary Arts
Course Number	066
Course Title	Baking
Former Title	
Units	3
Lecture Hours	16
Laboratory Hours	16
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>32</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

Basic techniques in the preparation and handling of ingredients to produce presentation quality baked/desserts for culinary professional.

<b>Budget Unit</b>	15714
<b>Classification Code</b>	Y
<b>Transfer Code</b>	C-Not transferable
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	D - Possible Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	130600 - Nutrition/Foods/Culinary Arts
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 06/19/12 by: Karen Warner

Divison Chair Approval Date: 06/26/12 by: Kristina Ross

Curriculum and Instruction Council Chair Approval Date: 05/12/2008

COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Student will apply criteria and guidelines learned for planning, preparation, and production of quality desserts for catered events.

Puff Pastry (from scratch) - 8 hours.

Students will learn puff pastry recipe techniques and will be able to make and produce Napoleons, Eclairs, Strudel, Puff Pastry as a basis for a variety of cream and fruit delicacies.

Cheesecakes (basic and fancy) - 8 hours.

Students will learn basic cheesecake styles and techniques to transform into "specialty" items that can become "signature desserts."

Pastry Doughs, Filo - 8 hours.

Scratch pastry and pie dough for tarts, quiche and fruit and berry pies.

Cakes and other baked items - 8 hours.

Use of filo dough for both desserts and appetizer hors d'oeuvres.

Total 32 hours

SANTA ANA COLLEGE PLAN OF INSTRUCTION  
DISCIPLINE, NUMBER, TITLE: Culinary Arts 066, Baking  
(If the discipline, number or title is being revised, above should reflect the NEW information.)

#### COURSE MATERIALS

Required texts and/or materials.(Include price and date of publication.)

#### Recommended readings and/or materials:

**Rosso, J. & Lukins, S. The New Basic Cookbook, Workman Publishing, New York.**

**Bon Appetite Magazine**

**Gourmet Magazine**

**Sunset Annual Recipe Book**

#### Other:

None

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

#### STUDENT LEARNING OUTCOMES

List subcategories and activities as needed for Category

#### Communication Skills

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Culinary Arts 070, Beverage Service

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Culinary Arts
Course Number	070
Course Title	Beverage Service
Former Title	
Units	2
Lecture Hours	32
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>32</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

Intervention procedures by servers of alcoholic beverages. Familiarization with different types of wines and champagnes used in the food service/hospitality industry. Not offered every semester. Students must be 21 years of age to participate in all activities.

<b>Budget Unit</b>	15714
<b>Classification Code</b>	Y
<b>Transfer Code</b>	C-Not transferable
<b>Method of Instruction</b>	10
<b>SAM Priority Code:</b>	D - Possible Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	130600 - Nutrition/Foods/Culinary Arts
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 06/19/12 by: Karen Warner

Divison Chair Approval Date: 06/26/12 by: Kristina Ross

Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

Requires students to analyze statements for validity, and solve problems relating to the subject matter. Requires students to research and analyze assigned reading material to arrive at correct responses to questions and statements on research papers. Requires the student to apply the solutions to the problems encountered in beverage fundamentals. Allow students to independently expand depth and breadth of beverage fundamentals knowledge.

Dealing with the Guest/Patron that has consumed too much alcohol and signs to watch for in the quests attending a catered event to avoid an "Incident" - **4 hours**.

Liquor Liability laws effecting caterers and event planners. How to protect yourself from being sued due to the current liquor laws in the state of California - **10 hours**.

Familiarization by brand, region, price, name, appearance, smell varietal vs. proprietary wines, appellation and estate growths with the various types of wines used to enhance food presentations: Burgundies, Champagnes/Sparkling Wines, Dessert Wines, Beaujolais - **18 hours**.

Critiquing of these types of wines will be a major segment of the class.

SANTA ANA COLLEGE                      PLAN OF INSTRUCTION  
DISCIPLINE, NUMBER, TITLE: Culinary Arts 070, Beverage Service  
(If the discipline, number or title is being revised, above should reflect the NEW information.)

**COURSE MATERIALS**

Required texts and/or materials. (Include price and date of publication.)

**Recommended readings and/or materials:**

**Bon Appetit Magazine, American Institute of Wine and Food Publications.**

**Other:**

None

**WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?**

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

**STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

**Communication Skills**

1. - LISTENING AND SPEAKING SKILLS: Students will listen to the lecture material and answer questions in class. Students will be encouraged to ask questions, restate concepts in their own words and



first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Culinary Arts 100, Introduction to Culinary Arts and Hospitality  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Culinary Arts
Course Number	100
Course Title	Introduction to Culinary Arts and Hospitality
Former Title	
Units	2
Lecture Hours	32
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>32</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**  
None

CATALOG DESCRIPTION

Practices and procedures for individuals interested in a career in the Culinary Arts and Hospitality or allied fields. Includes field trips to industry sites and interaction with actual working professionals in the field.

<b>Budget Unit</b>	15714
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	10
<b>SAM Priority Code:</b>	D - Possible Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	130600 - Nutrition/Foods/Culinary Arts
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 06/19/12 by: Karen Warner

Divison Chair Approval Date: 06/26/12 by: Kristina Ross

Curriculum and Instruction Council Chair Approval Date: 05/12/2008

COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Requires students to analyze statements for validity, and solve problems relating to the subject matter. Requires student to research and analyze assigned reading material to arrive at correct responses to questions and statements on research papers. Requires the student to apply the solutions to the problems encountered in event planning. Allow students to independently expand depth and breadth of event planning knowledge. The student will apply criteria and guidelines presented in the course to select a type of service, plan the event, estimate food, personnel and equipment needs. Student will be able to prepare a bid and write a contract. Emphasis on class project(s) will be researching the various types of opportunities that exist as a means of preparing the student for full-time employment in the profession.

Introduction to Professional Catering and Event Planning from the foods and non-foods aspect. Necessary basic business skills and knowledge required to start a catering business - 4 hours.

Menu planning responsibilities - 2 hours.

Introduction to the specialized segments of Catering/Event Planning: Wedding Planner/Consultants, Strike-Fire Catering, Kosher Catering, Social Catering, Corporate Event Planning, Fund Raising Event Planning - 4 hours.

Staffing requirements to support an event. How to know/figure staffing labor and calculate costs - 4 hours.

Understanding and distinction of the three types of licenses issued by the Business and Professions Code, State of California - 4 hours.

On Premise Caterers (Hotel Banquet Facilities - In-plant feeders). Off Premise Caterers. Accommodator Service - 4 hours.

Liquor Liability Impact on Caterers - 2 hours.

Presentation techniques to the client and preparation of the proposal as a prelude to the contract for services - 2 hours.

Contract for services between Client and Caterer/Event Planner - 2 hours.

Event Design and Layout - 4 hours.

Total 32 hours.

SANTA ANA COLLEGE            PLAN OF INSTRUCTION  
DISCIPLINE, NUMBER, TITLE: Culinary Arts 100, Introduction to Culinary Arts and Hospitality  
(If the discipline, number or title is being revised, above should reflect the NEW information.)

#### COURSE MATERIALS

Required texts and/or materials. (Include price and date of publication.)

#### Recommended readings and/or materials:

Bon Appetite Magazine, Special Event Magazine

The Chef's Companion, A Concise Dictionary of Culinary Terms, Elizabeth Reely

The Chef's Book of Formulas, Arno Schmidt

#6

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Culinary Arts 145, Foods Presentation Pantry/Garde Manger  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Culinary Arts
Course Number	145
Course Title	Foods Presentation Pantry/Garde Manger
Former Title	
Units	2
Lecture Hours	24
Laboratory Hours	24
Arranged Hours	None
Total Semester Contact Hours	48

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

Foods presentation and cold food preparation emphasizing knife usage of fruit and vegetable.

<b>Budget Unit</b>	15714
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	C - Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	130600 - Nutrition/Foods/Culinary Arts
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	Letter Grade or P/NP

Curriculum Office Use Only.

Department Chair Approval Date: 06/19/12 by: Karen Warner

Divison Chair Approval Date: 06/26/12 by: Kristina Ross

Curriculum and Instruction Council Chair Approval Date:

COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

The student will apply his/her knowledge including advanced food preparation techniques, elegant service and organizational skills for a catered event through planning, presentation and service.

**Theme development for food presentation and pantry operations - Lec 3 hours**

Policies, procedures, equipment use and care

**Identify fruit and vegetable suitable for carving for emphasis and artful presentation on the buffet table and fruit, vegetable and food decoration for plate presentation - Lec 7/ Lab 14 hours**

**Design of food stations for food type grouping for theme continuity - Lec 3/ Lab 6 hours**

Egg cookery, cereals and grains and meats for garnish preparation

**Food storage and preservation for display and food preparation and transportation to event site - Lec 3/Lab 1 hour**

**Table Setting and Service - To become familiar with proper table service - Lec 3/Lab 1 hour**

**Quantity calculations and extensions and Rules of Determination for item quantities - Lec 3/Lab 1 hour**

**Presenting the menu to the client; Includes pricing and selling techniques - Lec 2/Lab 1 hour**

**Lecture 24 hours**

**Laboratory 24 hours To plan, prepare and present a catered affair**

**Total 48 hours**

SANTA ANA COLLEGE PLAN OF INSTRUCTION

DISCIPLINE, NUMBER, TITLE: Culinary Arts 145, Foods Presentation Pantry/Garde Manger  
(If the discipline, number or title is being revised, above should reflect the NEW information.)

COURSE MATERIALS

Required texts and/or materials.(Include price and date of publication.)

**Required:** Styler, Christopher.. *Working the Plate: The Art of Food Presentation*, ed. John Wiley & Sons, Inc., 2006, ISBN: 13:978047147.

and

**Required:** ~~Yudd Wiley, Ronald A.J. *Successful Buffet Management*, ed. Van Nostrand Reinhold, 1990 & Sons Inc.. *Professional Chef*, 9th ed. The Culinary Institute of America, 2011, ISBN: 9780442205751.~~

**Recommended readings and/or materials:**

**Bon Appetite Magazine, Restaurants and Institutions Magazine, Foodscaping(s) and Presentation**

**Other:**

None

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

#1

first Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications. last

SANTA ANA COLLEGE COURSE OUTLINE  
 DISCIPLINE, NUMBER, TITLE: Anthropology 101L, Physical Anthropology Laboratory  
 (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Anthropology	
Course Number	101L	
Course Title	Physical Anthropology Laboratory	
Former Title		
Units	1	
Lecture Hours	None	
Laboratory Hours	48	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>48</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

Prerequisite

Anthropology 101 or concurrent enrollment.

CATALOG DESCRIPTION

Laboratory exercises and experiments designed to explore and understand the primary areas of physical anthropology: evolutionary theory, principles of genetics, comparative anatomy, physiology, behavior and ecology of vertebrates with an emphasis on nonhuman primates, analysis of fossil evidence for human evolution, human biology and variation, growth and adaptability, and biomedical anthropology. Includes both traditional and virtual laboratory experiences.

<b>Budget Unit</b>	<u>15610</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	20
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	220200 - Anthropology
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 04/18/12 by: Sandra Wood

Division Chair Approval Date: 04/20/12 by: Bill Courter

Curriculum and Instruction Council Chair Approval Date:

#### COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

A primary objective of the lab is to learn to collect, analyze, and interpret scientific evidence. Students will learn to identify distinguishing traits of a wide variety of life forms utilizing comparison and contrast. Students will follow the procedures utilized by taxonomists to classify living and extinct organisms and evaluate and interpret their conclusions based on evidence. Students will analyze and evaluate a variety of hypotheses related to human evolution (i.e. the origin of bipedalism, the origin of speech, and the increase in human brain size). Virtual laboratory modules on the CD-ROM require the ability to gather and interpret new data as a means of testing hypotheses. These exercises also include measurement techniques, plotting data and interpreting graphs.

3 hours - Lab orientation - Science and the Scientific Method

The students will become acquainted with laboratory equipment, procedures, and lab "etiquette". Students learn the purpose of science and the steps in the scientific method.

3 hours - Natural Selection

Students will learn to understand, analyze and evaluate the concept of natural selection as outlined by Charles Darwin.

3 hours – Cytogenetics and Molecular Genetics

Students will be able to identify and distinguish prokaryotic and eukaryotic cells: to identify the cellular structures and their functions related to evolution; to learn the similarities and differences between mitosis and meiosis. To be exposed to chromosomal abnormalities. Students will understand the structure and primary functions of DNA (replication and protein synthesis) and the role of mutations in evolution. To become familiar with uses and implications of biomedical genetic research.

3 hours - Genetics

Students will learn the principles and patterns of genetic inheritance including Mendelian and non-Mendelian traits. To become familiar with human pedigree analysis.

3 hours – Lab Practicum #1

Students will be tested on the overall comprehension of the content of the first four labs. The exam will include identification, completing parts of previous exercises and problem solving.

3 hours - Biological Classification and Systematics and Comparative Vertebrate Anatomy

Students will learn the principles of taxonomy including the differences between traditional taxonomy and cladistics. To become familiar with the modern division of 5 kingdoms of life forms and criteria utilized for these distinctions. To evaluate taxonomic conclusions disagreements. To experience classifying 'simulated' animals. Students will learn the distinguishing traits of fish, amphibians, reptiles, birds, and mammals. To understand the relationship between structure and function.

3 hours - Characteristics of Nonhuman Primates

Students will be able to identify, compare and contrast, the distinguishing traits of nonhuman primates as an order of mammals. To be able to identify the differences among prosimians, New & Old World monkeys, lesser apes and great apes.

3 hours - Nonhuman primate behavioral observations - Field trip to: L.A., Santa Ana, or San Diego Zoo

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Anthropology 104, Language and Culture

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Anthropology
Course Number	104
Course Title	Language and Culture
Former Title	
Units	3
Lecture Hours	48
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	48

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

General introduction to the processes of human communication. Includes the relationship between language and culture, acquisition of first and second languages, languages in contact, sociolinguistics and the effects of both language and culture on inter/intra group communication. Languages spoken in the local area are used as basis of study. (Same as English 104.)

<b>Budget Unit</b>	<u>15610</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	10
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	220200 - Anthropology
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	Letter Grade or P/NP

Curriculum Office Use Only.

Department Chair Approval Date: 04/18/12 by: Sandra Wood

Divison Chair Approval Date: 04/20/12 by: Bill Courter

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

All segments require critical reading and analysis, synthesis and application of vocabulary, concepts and learning skills at the college level. Critical listening and writing is also required in every segment.

### I. Introduction to Language (6 hours)

- A. Students will identify the various definitions of Language and describe the characteristics of human language.
- B. Students will recognize the language families of the world.
- C. Students will identify the characteristics of a native speaker of any language and compare the characteristics those of a non-native speaker.

### II. The Linguist and Linguistics (3 hours)

- A. The students will define the elements of the discipline of theoretical and applied linguistics and recognize the role of linguistic knowledge in various disciplines, e.g., speech pathology, applied language teaching, translation.
- B. The students will apply knowledge of phonology, morphology and syntax to simple problems, and they will analyze the results.

### III. Introduction to Culture (9 hours)

- A. The students will identify various definitions of culture and coordinate these to linguistic concepts.
- B. The students will describe the Sapir-Whorf Hypothesis and apply the weak and strong definition of the hypothesis to cultural examples.
- C. The students will describe and exemplify the concepts of *emic* and *etic*.
- D. The students will analyze and exemplify the co-extensive nature of language and culture.
- E. The students will analyze what occurs when languages come into contact.
- F. The students will demonstrate examples of language change due to cultural contexts.

### IV. Introduction to Communication (6 hours)

- A. The students will analyze the difference between *Communication*, the hypernym and *Language*, the hyponym.
- B. The students will identify channels of communication.
- C. The students will examine the differences between verbal and nonverbal communication and give examples. They will apply the concept of *emic* and *etic* to this topic in an intercultural review.
- D. The students will apply their knowledge of culture and communication to the situational context of communication and intercultural mismatches.

### V. Language and the Brain (Neurolinguistics) (3 hours)

- A. The students will recognize the distinctions between animal and human communication with regard to the brain.
- B. The students will describe brain lateralization.
- C. The students will apply knowledge of the brain to what occurs during acquired brain injury.
- D. The students will recognize the speech centers of the brain.
- E. The students will describe the results of language deprivation before and after puberty.

### VI. Language Acquisition (9 hours)

- A. The students will describe the elements of first language acquisition.
- B. The students will compare and contrast the elements of first and second language acquisition in children and then in adultus.
- C. The students will observe a monolingual demonstration and describe the elements that contribute to effective and ineffective language teaching strategies.
- D. The students will describe a contrastive analysis between English and another language for the purpose of



#19

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Anthropology 104H, Honors Language and Culture  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Anthropology	
Course Number	104H	
Course Title	Honors Language and Culture	
Former Title		
Units	3	
Lecture Hours	48	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>48</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**
**PREREQUISITE(S)**
**Prerequisite**

A high school or college GPA of 3.0 or above.

**CATALOG DESCRIPTION**

Enriched, in-depth study of the processes of human communication, including the relationship between language and culture, acquisition of first and second languages, languages in contact, sociolinguistics and the effects of both language and culture on inter/intra group communication. Languages spoken in the local area are used as the basis of study. Requires individual research and oral presentations of readings in a seminar setting. (Same as English 104H.)

<b>Budget Unit</b>	<u>15610</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	10
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	220200 - Anthropology
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 04/18/12 by: Sandra Wood

Divison Chair Approval Date: 04/20/12 by: Bill Courter

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

### I. Introduction to Language

A. Students will identify the various definitions of Language and describe the characteristics of human language.

B. Students will recognize the language families of the world.

C. Students will identify the characteristics of a native speaker of any language and compare the characteristics to those of a non-native speaker.

**\*D. Protocols and ethics of field methods**

**\*E. Students will develop a simple question for research, apply the ethics of the discipline and create a hypothetical field methods study, e.g., "What is the attitude of native Spanish speakers to Spanglish?"**

### II. The Linguist and Linguistics

A. The students will define the elements of the discipline of theoretical and applied linguistics and recognize the role of linguistic knowledge in various disciplines, e.g., speech pathology, applied language teaching, translation.

B. The students will apply knowledge of phonology, morphology and syntax to simple problems, and they will analyze the results.

### III. Introduction to Culture

A. The students will identify various definitions of culture and coordinate these to linguistic concepts.

B. The students will describe the Sapir-Whorf Hypothesis and apply the weak and strong definition of the hypothesis to cultural examples.

C. The students will describe and exemplify the concepts of *emic* and *etic*.

D. The students will analyze and exemplify the co-extensive nature of language and culture.

E. The students will analyze what occurs when languages come into contact.

F. The students will demonstrate examples of language change due to cultural contexts.

### IV. Introduction to Communication

A. The students will analyze the difference between *Communication*, the hypernym and *Language*, the hyponym.

B. The students will identify channels of communication.

C. The students will examine the differences between verbal and nonverbal communication and give examples. They will apply the concept of *emic* and *etic* to this topic in an intercultural review.

D. The students will apply their knowledge of culture and communication to the situational context of communication and intercultural mismatches.

### V. Language and the Brain

A. The students will recognize the distinctions between animal and human communication with regard to the brain.

B. The students will describe brain lateralization.

C. The students will apply knowledge of the brain to what occurs during acquired brain injury.

D. The students will recognize the speech centers of the brain.

E. The students will describe the results of language deprivation before and after puberty.

### VI. Language Acquisition

A. The students will describe the elements of first language acquisition.

#10

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Biology 109, Fundamentals of Biology

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Biology
Course Number	109
Course Title	Fundamentals of Biology
Former Title	
Units	3
Lecture Hours	48
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	48

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

Principles of biology stressing the relationship of all organisms from anatomical, physiological and ecological points of view. Includes cell machinery, genetics, reproduction, embryology, animal behavior, botany, ecology, evolution and human physiology. Concurrent enrollment in Biology 109L recommended. Designed for non-biology majors.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	10
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	Letter Grade or P/NP
Curriculum Office Use Only.	

Department Chair Approval Date: 02/02/12 by: Jubal Hampton

Divison Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

Students are expected to (1) learn the principles of biology with emphasis on the relationship of all organisms from an anatomical, physiological and ecological point of view, and (2) develop an appreciation for the effects biology has as a science on our daily life.

1. Cells (3 hrs): Structure and size comparison
2. Cell Components (3 hrs): Function of different cell components
3. Chemicals of Life (3 hrs): Basic structure and function of micromolecules (e.g., amino acids, nucleotides, etc.) and macromolecules (e.g., starch, proteins, nucleic acids, etc.)
4. Enzymes (3 hrs): Structure and function of enzymes in cellular metabolism
5. Respiration and Photosynthesis (3 hrs): The physiological mechanism through which organisms breathe and why oxygen is required
6. Reproduction and Heredity (6 hrs): Significance of mitosis and meiosis, and their relationship to heredity
7. Embryology (3 hrs): Early development of animals following fertilization
8. Plant Anatomy (3 hrs): Structure and function of roots, stems, leaves and flowers
9. Invertebrates (3 hrs): Different phyla to which different invertebrates belong
10. Vertebrates, Chordates (3 hrs): Internal and external structures of vertebrates
11. Vertebrates: Physiology (3 hrs): Function of some of the important internal organs of vertebrates
12. Population (3 hrs): Evolution of higher organisms through natural selection
13. Ecology (6 hrs): Study of the interrelationship of the organism and its environment
14. Microorganisms (3 hrs): Structure and importance of various microorganisms

SANTA ANA COLLEGE                      PLAN OF INSTRUCTION

DISCIPLINE, NUMBER, TITLE: Biology 109, Fundamentals of Biology

(If the discipline, number or title is being revised, above should reflect the NEW information.)

**COURSE MATERIALS**

Required texts and/or materials. (Include price and date of publication.)

**Required:** Campbell, N., J. Reece, M. Taylor, E. Simon, J. Dickey. *Biology: Concepts and Connections*, 6th ed. Benjamin Cummings, 2009, ISBN: 0321489845. \$140

**Recommended readings and/or materials:**

**None**

**Other:**

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE  
 DISCIPLINE, NUMBER, TITLE: Biology 109H, Honors Fundamentals of Biology  
 (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

## CATALOG ENTRY

Discipline	Biology
Course Number	109H
Course Title	Honors Fundamentals of Biology
Former Title	
Units	3
Lecture Hours	48
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>48</u>

## COURSE IDENTIFICATION NUMBER(S) (C-ID)

## PREREQUISITE(S)

**Prerequisite**

A high school or college GPA of 3.0 or above.

## CATALOG DESCRIPTION

Traditional Biology, enriched by extensive instructor-prepared study guides for each subject area of curriculum. Additional enhancement by outside reading suggestions and optional student reports. Class participation and discussion is strongly encouraged, as are questions on current reports and news in the popular media and scientific sources. Information will be expanded by reference to research observations and by appropriate references to classical and current literature. Emphasis is on analysis of pertinent topics using critical reading and interpretation skills. Concurrent enrollment in Biology 109L is recommended. Designed for non-biology majors.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	10
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No

**Grading Options:** Letter Grade or P/NP  
Curriculum Office Use Only.

Department Chair Approval Date: 02/02/12 by: Jubal Hampton  
Division Chair Approval Date: 05/03/12 by: Phil Hughes  
Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

~~16 Weeks, 48 Hours Total~~

~~1.5 hours-- Scientific Methods: Cause and effect relationships, analytic methods and statistics, critical analysis of scientific vs. main-stream literature, observations and conclusions. Double-blind studies, and scientific rigor. Definitions of "life". Homeostasis.~~

~~1.5 hours--~~

A total of 48 lecture hours. Topics include:

1- Scientific Method and the process of science

2- Introduction to Chemistry and the major groups of biomolecules--: Molecular form and function, ~~nucleic acids and enzymes.~~

~~3 hours-- Cells and the functional anatomy of the eukaryotic cell. Anatomy and function of cell organelles. Membrane structure, functional dynamics and transport.~~

~~3 hours-- Methods of producing and utilizing cellular energy. Energy transport and utilization, ATP, photosynthesis, anaerobic and aerobic respiration.~~

~~3 hours-- Cell reproduction, cell cycle, cytokinesis, - Cells structure and function.~~

4- Membrane structure and transport across membranes.

5- Metabolism: chemical principles, enzymes, and regulation of metabolic pathways.

6- Cellular respiration and the production of ATP.

7- Photosynthesis.

8- Cell reproduction, the cell cycle, mitosis, meiosis, sexual and asexual reproduction, ~~stem cells, cell differentiation, cancer, hypertrophy vs. hyperplasia.~~ 3 hours-- Genetics including classical and cancer.

9- Genetics: including classical Mendelian genetics, incomplete dominance, co-dominance, X-linked inheritance, congenital defects. 3 hours-- DNA and

~~nucleic acids: replication,~~ 10- Molecular genetics: DNA replication.

11- Gene expression and regulation of gene expression including transcription, translation, ~~RNA, DNA~~ and protein synthesis.

~~3 hours-- Introduction to Animal Anatomy & Physiology. Review of homeostasis, a~~ 12- Animal diversity: Introduction to the major Animal phyla and principles of biodiversity.

#12

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

**SANTA ANA COLLEGE COURSE OUTLINE**

**DISCIPLINE, NUMBER, TITLE:**Biology 212, Animal Diversity and Ecology

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Biology	
Course Number	212	
Course Title	Animal Diversity and Ecology	
Former Title	Ecology and Animal Diversity	
Units	5	
Lecture Hours	48	
Laboratory Hours	96	
Arranged Hours	None	
Total Semester Contact Hours	<del>None</del>	<u>144</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**

**PREREQUISITE(S)**

**Prerequisite**

Biology 211 with a grade of C or better.

**CATALOG DESCRIPTION**

A study of ecological principles, and relationships between animal diversity and ecosystems. Habitat, populations, ecological interactions, and environmental influences are stressed while surveying animal diversity and addressing structure, function, behavior, and adaptation of major taxonomic groups. Required of majors in biology, medicine, forestry and agriculture. Field trips required.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 02/06/12 by: Jubal Hampton

Divison Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Content Objectives; -describe interactions between organisms and their role(s) in the ecological community - understand the concept of an ecosystem and energy flow -recognize the relationship between environmental factors and biodiversity -appreciate biodiversity and its role in ecosystems -apply ecological principles to various communities and populations -describe similarities and differences among animal taxa -identify characteristics of major taxonomic animal groups -understand the organization of animal and animal like organisms -comprehend the relationship between form, function, and adaption.

Ecology (12 hours) - Study of the ecologica systems including biotic zones, ecosystem components, population dynamics, limiting factors, biogeochemical cycles and energy acquisition.

Survey of Protozoa (3 hours) - Characteristics, classification and functions of various protozoa phyla and their roles in ecosystems.

Invertebrate phyla (12 hours) - major phyla and classes of invertebrates (Porifera, Cnidaria, Platyhelminthes, Nematoda, Mollusca, Annelida, Arthropoda, Echinodermata) stressing on characteristics, anatomical advances, habitats, adaptations to and roles in ecosystems.

Vertebrates (12 hours) - Major classes and orders of the phylum (invertebrates Chordates, Agnatha, Chondrichthyes, Osteichthytes, Amphibia, Reptilia, Aves, Mammalia) Chordata characteristics, habitats, adaptations to and roles in ecosystems.

Vertebrate Anatomy and Physiology (9 hours) - knowledge of the vertebrate body and the functioning of the various organ systems stressing the differences between the aquatic and terrestrial animals. Areas of study include Support, protection, movement; circulation; gas exchange; excretion; digestion and nutrition, nervous coordination, reproductive strategies.

### **Introduction Lab 3 Hours**

Exploration of Biomes

### **Foods Webs and Tropic Levels Lab 3 Hours**

Library Search Strategies

### **Limiting Factors Lab 3 Hours**

Carrying Capacity

### **Population Growth Lab 3 Hours**

Field Trip

### **Lab Exam #1 Lab 3 Hours**

Protozoa

### **Porifera & Cnidaria Lab 3 Hours**

Platyhelminthes & Nematoda

### **Molluscs Lab 3 Hours**

Annelida



#13

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Biology 214, Plant Diversity and Evolution

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Biology
Course Number	214
Course Title	Plant Diversity and Evolution
Former Title	Evolution and Plant Diversity
Units	5
Lecture Hours	48
Laboratory Hours	96
Arranged Hours	None
Total Semester Contact Hours	144

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

Biology 211 with a grade of C or better.

CATALOG DESCRIPTION

Principles and processes of evolution leading to biodiversity. Survey of the organisms, viruses, prokaryotes, fungi, algae, and plants with emphasis on evolutionary adaptations of the anatomy, physiology, and life cycles of these organisms. Field trips required.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	Letter Grade or P/NP

Curriculum Office Use Only.

Department Chair Approval Date: 02/02/12 by: Jubal Hampton

Divison Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Require the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structure and organisms, evaluate and apply problem solving techniques (inquiry based), to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. Reading text and other assigned materials in preparation for class meetings, laboratory exercise and examinations. Completion of the review questions, problems and/or workbook assignments. Emphasis on organizational skills, comparing and contrasting related concepts, recognition of significant structures, functions, behaviors, processes and interrelationships and application of principles to specific examples/problems.

3 Hours - Introduction to plant diversity & Evolution; Genetic Diversity & Sexual Reproduction how they effect diversity. Understand the history of life on Earth and it's diversity. Compare and contrast the effect of sexual versus asexual reproduction.

3 Hours - Sources of Diversity & Transmission from Generation to Generation Understand how traits are passed; Process of Evolution & Causes of Change from generation to generation. State various life cycles, zygonic, gametic and sporic. Explain the causes of evolution.

3 Hours - Natural Selection & Adaptation Explain the causes of evolution; Population genetics. Explain the role of natural selection in evolution and its effect on populations. Apply mathematical model to measure rate of evolution.

3 Hours - Speciation, Allopatric & Sympatric; Systematics & Cladistics. List steps, and reproductuve barriers in speciation. Describe the hierarchical levles of Taxa and means of classification.

3 Hours - EXAM; Molecular Systematics & Major groups (Domains), differences among taxa at Prokaryotes & Virus hierarchical levels. State the domains and their differences. Explain the role sof prokaryotes and viruses in the ecosystem.

3 Hours - Origin of Eukaryotes & Eukaryotic Kingdom Recognize characteristics of major taxonomic groups Fungi. Explain the role of fungi in the ecosystem.

3 Hours - Protista major taxonomic groups. Explain the role of Protista in the ecosystem. State the significance of various life cycles and types of nutrition.

3 Hours - Protista (cont.); EXAM

3 Hours - Bryophyta, biodiversity Vascular Plants. describe the evolution of the structures for adaptation of plants on land and the life cycles and structures of the bryophytes. Describe the significance of the vascular system and changes in the structures and life cycles of these plants.

3 Hours - Vascular plants (cont.); Seed Plants-Gymnosperms. Discuss the structure and significance of the evolution of the seed and changes in the structures and life cycles of these plants.

3 Hours -Flowering plants. State the parts of flowers and fruits and give the evolutionary significance of each.

3 Hours - Flowering plants (cont.); EXAM

# SANTA ANA COLLEGE COURSE OUTLINE APPROVAL SHEET

DISCIPLINE, NUMBER, TITLE: Secondary Subjects High School Subjects 229 Skills for Success

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

* NEW _____	REVISION WITH _____	W/O <input checked="" type="checkbox"/>	CATALOG CHANGES
DELETION _____	REVISION WITH _____	W/O <input checked="" type="checkbox"/>	CLASS SCHEDULE CHANGES

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

### CATALOG ENTRY (60 word limit; underline changes if a revision)

Course Number: Secondary Subjects High School Subjects 229  
 Course Title: Skills for Success  
 Credits: 5  
 Class hours: 72 hours  
 Prerequisite: None  
 Advisory reading level: None  
 Assists students in developing skills that promote academic success. Students will learn study and organizational skills, goal setting, critical thinking skills, and written/oral communication. Compensatory strategies and technology will be emphasized.

### CLASS SCHEDULE ENTRY (maximum of four lines; underline changes if a revision)

SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS 229, SKILLS FOR SUCCESS. 5 credits. Assists students in developing skills that promote academic success. Students will learn study and organizational skills, goal setting, critical thinking skills, and written/oral communication. Compensatory strategies and technology will be emphasized.

Major Code N/A For this major, is the course Required \_\_\_\_\_ Elective \_\_\_\_\_

Does this course have arranged hours? Yes No N/A  By course \_\_\_\_\_

Co/Prerequisite\*? N/A  Approval Code \_\_\_\_\_ Co/Prerequisite Course Requirement \_\_\_\_\_

Co/prerequisite message (10 character limit, (SEE CATALOG) \_\_\_\_\_

Is course cross-listed (same as) with another course? Yes \_\_\_ No  Subject ID \_\_\_\_\_

Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)

Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes \_\_\_\_\_ N/A

List departments notified \_\_\_\_\_

Budgetary Unit 18200 Classification Code K Transfer Code N/A SAM Priority Code E

Method of Instruction\*\* Instructor LHE: \_\_\_\_\_ Lecture  Laboratory \_\_\_\_\_

If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOP Code: 4930.30

Proposed by Mary Stephens & Kristina de la Cerda Date: May 2012

Division Dean Chris Kosko *C. Kosko* Date: May 2012

Curriculum Committee Approval *[Signature]* Date: May 2012

Curriculum Council Approval Date \_\_\_\_\_ Subject ID Number HSS-229

(Signatures indicate review and approval of any advisory co/prerequisites as per Board Policy) Noncredit Category Code C

DISCIPLINE, NUMBER, TITLE: Secondary Subjects High School Subjects 229 Skills for Success

(If the discipline, number or title is being revised, above should reflect the NEW information) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Course Number: Secondary Subjects High School Subjects 229

Course Title: Skills for Success

Credits: 5

Class hours: 72 hours

Prerequisite: None

Assists students in developing skills that promote academic success. Students will learn study and organizational skills, goal setting, critical thinking skills, and written/oral communication. Compensatory strategies and technology will be emphasized.

**COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES**

N/A  X

Yes  No  SAC Department Chair Mary Skyles Date 5/30/12  
 Yes  No  SCC Department Chair A/a Date \_\_\_\_\_

**COURSE CONTENT**

(Include major topics of the course time required\*, and what the student is expected to learn.)

Major Topics	Time Required	What Students Will Learn
Unit 1: Goal Setting	8 hours	<ul style="list-style-type: none"> <li>Identify the values, standards, &amp; resources which influence personal goals</li> <li>Define realistic short- and long-term goals</li> <li>Recognize personal benefits and positive affirmations to reinforce goal attainment</li> </ul>
Unit 2: Time Management	5 hours	<ul style="list-style-type: none"> <li>Assess personal time use</li> <li>Prioritize daily activities</li> <li>Maintain a student schedule</li> </ul>
Unit 3: Lecture Notes	3 hours	<ul style="list-style-type: none"> <li>Recognize important information when presented in class</li> <li>Use a structured outline with abbreviations and short phrases</li> <li>Revise notes for study purposes</li> </ul>
Unit 4: Reading Effectively	6 hours	<ul style="list-style-type: none"> <li>Use the SQRW strategy of reading by surveying important information, creating questions from a text, reading the text critically, and writing out answers to questions from the text</li> <li>Read graphs and tables effectively</li> </ul>
Unit 5: Graphs, Tables, & Charts	5 hours	<ul style="list-style-type: none"> <li>Comprehend the purpose and uses of graphic aids</li> <li>Successfully interpret graphs, tables, and charts</li> </ul>
Unit 6: Using Maps	3 hours	<ul style="list-style-type: none"> <li>Identify key parts of a map, such as the map legend, compass rose, and m/k scales.</li> <li>Effectively read a map to determine a route between two locations</li> </ul>

DISCIPLINE, NUMBER, TITLE: SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS- ENGLISH 070,  
The Short Story

115

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

* NEW _____	REVISION WITH _____	W/O _____	X _____	CATALOG CHANGES
DELETION _____	REVISION WITH _____	W/O _____	X _____	CLASS SCHEDULE CHANGES

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

CATALOG ENTRY (60 word limit; underline changes if a revision):  
 Course number SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – ENGLISH 070  
 Course Title The Short Story  
 Credits: 5  
 Class hours: 72  
 Prerequisite: None  
 Introduces the student to the short story as a literary form so that the student will learn how the individual elements work together to present a theme of effect. The student will study the development of the short story and will read selected short stories from various periods. Course cannot be challenged. Open entry/open exit.

CLASS SCHEDULE ENTRY (maximum of four lines; underline changes if a revision).  
High School Subjects 070, The Short Story. 5 credits. Introduces the student to the short story as a literary form so that the student will learn how the individual elements work together to present a theme of effect. The student will study the development of the short story and will read selected short stories from various periods. Open entry/open exit.

INFORMATION IN THIS SECTION MUST BE COMPLETED BEFORE SUBMISSION TO A CURRICULUM COMMITTEE

Major Code N/A For this major, is the course Required \_\_\_\_\_ Elective \_\_\_\_\_

Does this course have arranged hours? Yes No N/A X By course \_\_\_\_\_

Co/Prerequisite\*? N/A X Approval Code \_\_\_\_\_ Co/Prerequisite Course Requirement \_\_\_\_\_

Co/prerequisite message (10 character limit, (SEE CATALOG) \_\_\_\_\_

Is course cross-listed (same as) with another course? Yes \_\_\_\_\_ No X Subject ID \_\_\_\_\_

Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)

Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes \_\_\_\_\_ N/A \_\_\_\_\_ X

List departments notified \_\_\_\_\_

Budgetary Unit 18200 Classification Code K Transfer Code N/A SAM Priority Code E

Method of Instruction\*\* Instructor LHE: \_\_\_\_\_ Lecture X Laboratory \_\_\_\_\_

If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOP Code: 4930.62

Proposed by Carrie Patton *Carrie Patton* Date: 04-30-2012

Division Dean Christine Kosko *Christine Kosko* Date: 4/30/12

Curriculum Committee Approval Julia W. W. W. *Julia W. W. W.* Date: 4/30/2012

Curriculum Council Approval Date \_\_\_\_\_ Subject ID Number HSENG - 070

(Signatures indicate review and approval of any advisory co/prerequisites as per Board Policy) Noncredit Category Code C

**DISCIPLINE, NUMBER, TITLE:** SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS 070,  
The Short Story.

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

---

---

**CATALOG ENTRY:**

Course number: SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS 070

Course Title The Short Story

Credits: 5

Class hours: 72

Prerequisite: None

Introduces the student to the short story as a literary form so that the student will learn how the individual elements work together to present a theme of effect. The student will study the development of the short story and will read selected short stories from various periods. Course cannot be challenged. Open entry/open exit.

---

---

**COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES**

N/A

Yes	X	No	SAC Department Chair	<u>Sue Garnett</u>	Date	<u>4/25/2012</u>
Yes	X	No	SCC Department Chair	<u>Jolene Shields (per email approval)</u>	Date	<u>4/23/2012</u>
				<u></u>		<u></u>
				<u></u>		<u></u>

See following page for course content

---

---

CURRICULUM & INSTRUCTION COUNCIL

AUGUST 27, 2012

**REVISED COURSE – FIRST READING**

Humanities

1. Japanese 198, Topics in Japanese

Science, Math and Health Sciences

2. Biology 109L, Fundamentals of Biology Laboratory
3. Biology 127, Ecology
4. Biology 128, Natural History of the California Coast
5. Biology 129, Ecology of Southern California
6. Biology 131, Natural History of the Southwest
7. Biology 132, Natural History of Death Valley
8. Biology 133, Desert Biology
9. Biology 134, Natural History of the Sonoran/Colorado Desert
10. Biology 169, Natural History of the Sierra Nevadas
11. Biology 229, General Microbiology
12. Medical Assistant 001, Cooperative Work Experience Education – Occupational
13. Medical Assistant 054, Medical Insurance and Billing Forms
14. Physics 279, College Physics I

Continuing Education

15. English As A Second Language 580, Conversation 2
16. High School Subjects 010, Learning Skills and Strategies
17. High School Subjects – Math 173, Basic Consumer Math 1B

**REVISED COURSE – SECOND READING**

Fine and Performing Arts

18. Art 196A, 3D Modeling Fundamentals
19. Art 197A, 3D Animation Fundamentals
20. Dance 130, Dance Improvisation
21. Dance 204A, Dance Production
22. Dance 204B, Dance Production
23. Dance 206A, Modern Dance I
24. Music 162, Class Piano II

**REVISED PROGRAMS – FIRST READING**

**Human Services**

- 25. Pharmacy Technology Degree (sac.phar.as) and Advanced Certificate Option (sac.phar.ca)
- 26. Pharmacy Technology Basic Certificate Option (sac.pharb.cert)

**Kinesiology**

- 27. Kinesiology AA-T Degree (sac.kin.aat)

**Science, Math and Health Sciences**

- 28. Medical Assistant – Administrative/Clinical Degree (sac.ma.as) and Certificate (sac.ma.ca)



first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Japanese 198, Topics in Japanese

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Japanese	
Course Number	198	
Course Title	Topics in Japanese	
Former Title		
Units	<u>0.5 – 3</u>	
Lecture Hours	<del>None</del>	<u>8 – 48</u>
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	<del>None</del>	<u>8 – 48</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

Prerequisite

None

CATALOG DESCRIPTIONS ~~Specialized courses~~

A specialized course on topics related to current needs of students.

Budget Unit	<u>15642</u>	
Classification Code	Y	
Transfer Code	<del>A-Transferable to both UC and CSU</del>	<u>C-Not transferable</u>
Method of Instruction	10	
SAM Priority Code:	E - Non-Occupational	
Repeatability:	R3 - Repeatable x3	
TOPS Code:	110100 - Foreign Languages, General	
Topics Course:	<del>No</del>	<u>Yes</u>
Open Entry/Exit:	No	
Grading Options:	<u>Letter Grade or P/NP</u>	

Curriculum Office Use Only.

Department Chair Approval Date: 04/12/12 by: Martha Guerrero

Divison Chair Approval Date: 04/26/12 by: Kathleen Patterson

Curriculum and Instruction Council Chair Approval Date:

COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

This plan of instruction requires and provides critical thinking skills throughout the course. Students develop the ability to apply college level concepts, vocabulary, and learning skills. Written assignments stress expository and analytical techniques using a variety of methods of presentation designs for the specific topics being studied.

Individual segments will be designed ~~with 0~~with 0.5-3.0 units for each course.

The proposed course outline will be submitted to the Dean of Humanities and Social Sciences and the Vice President of Academic Affairs at Santa Ana College for approval, prior to scheduling each course. The syllabus will be presented with a new course proposal form. When appropriate the course will be proposed with a permanent course number.

Content will stress general principles of wide applicability.

Hours: ~~variable:~~

SANTA ANA COLLEGE                      PLAN OF INSTRUCTION  
DISCIPLINE, NUMBER, TITLE: Japanese 198, Topics in Japanese  
(If the discipline, number or title is being revised, above should reflect the NEW information.)

#### COURSE MATERIALS

Required texts and/or materials. (Include price and date of publication.)

#### Recommended readings and/or materials:

None

~~Other: None~~

College level materials will be selected for individual topics as needed.

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

#### STUDENT LEARNING OUTCOMES

List subcategories and activities as needed for Category

~~Communication Skills~~

4 - Very important-often try to achieve

#2

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

**SANTA ANA COLLEGE COURSE OUTLINE**
**DISCIPLINE, NUMBER, TITLE: Biology 109L, Fundamentals of Biology Laboratory**

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Biology
Course Number	109L
Course Title	Fundamentals of Biology Laboratory
Former Title	
Units	1
Lecture Hours	None
Laboratory Hours	48
Arranged Hours	None
Total Semester Contact Hours	48

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**
**PREREQUISITE(S)**

**Prerequisite** ~~Biology 109/109H or concurrent enrollment:~~

None

**Corequisite**

BIOL 109

or

BIOL 109H

**CATALOG DESCRIPTION**

Laboratory experiments that illustrate important biological concepts at all levels of organization, from molecules and cells, to organisms, populations, communities and ecosystems. Content complements Biology 109/109H lecture material. Fieldtrip required.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	20
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No

**Grading Options:** Letter Grade or P/NP  
Curriculum Office Use Only.

Department Chair Approval Date: 02/02/12 by: Jubal Hampton  
Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

~~Requires the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner.~~  
CONTENTS OF LABS BY HOURS: 1. Introduction At least 15 of the following lab topics for a total of 48 lab hours:

1. The microscope: Introduction to the use of the compound microscope and microscope and dissecting microscope while observing various organisms, Introduction introduction to the metric system; - 3 hours.
2. Introduction to the cell and cellular organelles using prepared slides of body tissues, preparation of wet mount slide, introduction to diffusion and osmosis; - 3 hours
3. Chemistry: pH scale introduced and pH measurements made, testing for organic molecules; - 3.5 hours
4. Introduction to anaerobic and aerobic respiration with fermentation reaction performed by the students; - 3 hours
5. Cellular division - Introduction to mitosis, meiosis and karyotyping; - 3 hours
6. Mendelian Genetics with emphasis on blood typing, Rh factor, X-linked inheritance, relationship between cholesterol levels, heredity and heart disease; - 3 hours
7. Midterm Lab Practicum covering first six labs; - 3 hours 40 minutes
8. Molecular Genetics with emphasis on DNA structure and replication and protein synthesis, and introduction to genetic diseases; - 3 hours
9. Embryology of several species including starfish, frog, chicken, and human; - 3 hours
10. Animal Anatomy with emphasis on the detailed internal and external anatomy of the frog, and circulatory, skeletal, reproductive, and nervous human organ systems; - 3.5 hours
11. Plant Anatomy covering the structure The cell: cell structure, organelle function, membrane function.
3. Chemistry: pH scale, macromolecules.
4. Aerobic and anaerobic respiration.
5. Cellular division - mitosis and meiosis.
6. Classical (Mendelian) genetics.
7. Midterm Lab Practicum.
8. Molecular Genetics - DNA structure and replication, and protein synthesis.
9. Embryology - early animal development.
10. Animal Anatomy with emphasis on human anatomy and including an animal dissection.
11. Plant Anatomy - structure and function of seeds, roots, stems, leaves and flowers; - 3 hours 10 minutes.
12. -Field trip to Irvine Park to introduce the chaparral environment and the plants and animals common to this environment; - 3 hours 10 minutes
13. Evolution with a natural selection simulation of the evolution of the peppered moth, geographical distribution of species studying the desert pupfish, and introduction to Paleontology using fossil records; - 3 hours 40 minutes
14. Final Lab Practicum on Labs 8 through 13; - 3 hours 10 minutes
15. Review of Final Practicum and Final Lab Grades. - 3 hours 10 minutes - field observation of organisms and biological processes.
13. Evolution and natural selection, allopatric speciation, introduction to the fossil record.
14. Final Lab Practicum.
15. Review of Final Practicum
16. Environmental issues - pollution, habitat destruction, climate change and other current issues.
17. Ecology - population growth and species interactions
18. Biotechnology and ethics - ethical issues related to modern biotechnology.
19. Animal diversity - introduction to the diversity of the animal kingdom.
20. Plant diversity - introduction to the diversity of plants.
21. Microorganisms and disease.

# 3

CONTEXT OF THIS COURSE.)

## STUDENT LEARNING OUTCOMES

List subcategories and activities as needed for Category

SANTA ANA COLLEGE COURSE OUTLINE  
 DISCIPLINE, NUMBER, TITLE: Biology 127, Ecology  
 (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

## CATALOG ENTRY

Discipline	Biology
Course Number	127
Course Title	Ecology
Former Title	
Units	1
Lecture Hours	16
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>16</u>

## COURSE IDENTIFICATION NUMBER(S) (C-ID)

## PREREQUISITE(S)

**Prerequisite**

None

## CATALOG DESCRIPTION

Introduction to the basic principles of ecology. Study of ecosystems, biomes, and the relationships of plants and animals in the natural world. This is a field study course and includes overnight camping.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	60
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	<del>R1</del> <u>R2</u> - Repeatable <del>x1</del> <u>x2</u>
<b>TOPS Code:</b>	<u>40100 - Biology, General</u> -

**Topics Course:** No  
**Open Entry/Exit:** No  
**Grading Options:** Letter Grade or P/NP  
 Curriculum Office Use Only.

Department Chair Approval Date: 02/09/12 by: Jubal Hampton  
 Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**  
 (Include major topics of the course, time required, and what the student is expected to learn.)  
~~Require the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.~~

	<u>Weeks</u>	
2	2- Ecology of the ocean and saltwater marsh	3 3- Ecology of deciduous forest and chaparral
		4 4- Ecology of mountains
		3 5- Ecology of deserts
		4

- ~~1. - Apply knowledge of terminology found in plant and animal keys of Southern California ocean, chaparral, mountain and desert ecosystems. Contrast habitats of Southern California chaparral, mountains and deserts.~~
- ~~1. - Describe the major ecological areas of the Southern California chaparral, mountains and deserts. Develop a working knowledge of appropriate field guides for animal and plant species of the Southern California chaparral, mountains and deserts.~~
- ~~1. - Appreciate the diversity of habitats found in the Southern California chaparral, mountains and deserts. Appreciate the diversity of ecological life-zones found in the Southern California ocean, mountain and desert areas.~~
- ~~1. - Recognize the importance of understanding natural environments and work to preserve floral and faunal diversity.~~
- ~~1. - Integrate information in the course to develop a personal appreciation of nature. Employ information from the course for an individual's greater awareness to conserve wild and natural environments.~~

**Communication Skills**

5 - Essential-always try to achieve

- ~~1. - Listen and comprehend lectures, and observe displays about ecology. Read assigned material understanding vocabulary used in ecology. Discuss materials used in course, using correct terminology.~~

**Thinking and Reasoning**

#4

- 1. Flora and fauna of coastal terrestrial ecosystems (2 hours).

~~5-~~

- 1. Environmental problems of coastal environments (2 hours).

~~6-~~

- 1. Early history of coastal environments (1 hour).

SANTA ANA COLLEGE PLAN OF INSTRUCTION  
 DISCIPLINE, NUMBER, TITLE: Biology 128, Natural History of the California Coast  
 (If the discipline, number or title is being revised, above should reflect the NEW information.)

**COURSE MATERIALS**

Required texts and/or materials.(Include price and date of publication.)

Required: Griggs, G., *Introduction to California's Beaches and Coast*, ed. University of California Press, 2010, ISBN: 0520262905. \$20

**Recommended readings and/or materials:**

None

~~Other: None~~

Handouts

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?  
 (USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

**STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

SANTA ANA COLLEGE COURSE OUTLINE DISCIPLINE, NUMBER, TITLE: Biology 128, Natural History of the California Coast (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)		<b>ORIENTATION</b>	3-hour lecture	<b>FIELD TRIP</b>	13-hour lecture
<b>CATALOG ENTRY</b> Discipline Biology Course Number 128 Course Title Natural History of the California Coast					

Former Title		
Units	1	
Lecture Hours	16	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>16</u>

## COURSE IDENTIFICATION NUMBER(S) (C-ID)

## PREREQUISITE(S)

**Prerequisite**

None

## CATALOG DESCRIPTION

An ecological study of plant and animal life of the southern and central California coast. This is a field study course and includes overnight camping.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	60
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	R1-R2 - Repeatable x1-x2
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 02/09/12 by: Jubal Hampton  
 Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

~~Requires the student to critically discern the interrelationships between the abiotic and biotic components of coastal terrestrial and marine ecosystems. Requires the student to enumerate, delineate and differentiate flora and fauna of the inter-tidal area of the Neritic Zone. Requires the student to enumerate, delineate and differentiate flora and fauna of coast marine and terrestrial ecosystems. Requires the student to critically elucidate and excoigitate data amassed from survey of coastal marine and~~



#5

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

### STUDENT LEARNING OUTCOMES

List subcategories and activities as needed for Category

SANTA ANA COLLEGE		COURSE OUTLINE	
DISCIPLINE, NUMBER, TITLE: Biology 129, Ecology of Southern California			
(If the discipline, number or title is being revised, above should reflect the NEW information;)			
AND, the complete former course name MUST be included in the CATALOG ENTRY below.)			
CATALOG ENTRY			
Discipline	Biology		
Course Number	129		
Course Title	Ecology of Southern California		
Former Title			
Units	1		
Lecture Hours	16		
Laboratory Hours	None		
Arranged Hours	None		
Total Semester Contact Hours	<del>None</del>		<u>16</u>
COURSE IDENTIFICATION NUMBER(S) (C-ID)			
PREREQUISITE(S)			
<b>Prerequisite</b>			
None			
CATALOG DESCRIPTION			
Identification and study of the plants and animals of the ocean, mountain and desert regions of Southern California with emphasis on the organisms relationship to their environment. <u>This is a field study course and includes overnight camping.</u>			
<b>Budget Unit</b>	<u>16410</u>		
<b>Classification Code</b>	Y		
<b>Transfer Code</b>	A-Transferable to both UC and CSU		
<b>Method of Instruction</b>	60		
<b>SAM Priority Code:</b>	E - Non-Occupational		
<b>Repeatability:</b>	<del>R1</del> <u>R2</u> - Repeatable <del>x1</del> <u>x2</u>		
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>		

<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	
Department Chair Approval Date: <u>02/09/12</u> by: <u>Jubal Hampton</u>	
Divison Chair Approval Date: <u>05/03/12</u> by: <u>Phil Hughes</u>	
Curriculum and Instruction Council Chair Approval Date:	
<b>COURSE CONTENT</b>	
(Include major topics of the course, time required, and what the student is expected to learn.)	
Requires the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.	
	<b>Hours</b>
<b>1. Ecology of California</b>	<b>2</b>
<ul style="list-style-type: none"> <li>— 1. - Apply knowledge of terminology found in plant and animal keys of southern California mountains and deserts ecosystems. Contrast southern California mountains and deserts habitats:</li> <li>— 1. - Describe the major life zones of the southern California mountains and deserts. Develop a working knowledge of appropriate field guides for animal and plant species of the southern California mountains and deserts:</li> <li>— 1. - Appreciate the diversity of habitats found in the southern California mountains and deserts. Appreciate the diversity of ecological life zones found in the southern California mountains and deserts:</li> <li>— 1. - Recognize the importance of understanding natural environments and work to preserve floral and faunal diversity:</li> <li>— 1. - Integrate information in the course to develop a personal appreciation of nature. Employ information from the course for an individual's greater awareness to conserve wild and natural environments.</li> </ul>	5 5 6 16
<b>Communication Skills</b>	
-	
<u>5 - Essential-always try to achieve</u>	
1. - Listen and comprehend lectures, and observe displays about biology of the southern California mountains and deserts. Read assigned material understanding vocabulary used in ecology. Discuss materials used in course, using correct terminology:	
<b>Thinking and Reasoning</b>	
-	
<b>Information Management</b>	
-	
<b>Diversity</b>	
-	
<b>Civic Responsibility</b>	
-	
<b>Life Skills</b>	
-	
<b>Careers</b>	
-	
— 1. - Discuss careers in Federal and State agencies that involve preservation and conservation of the	

#6

Biology

Course Number	131				
Course Title	Natural History of the Southwest				
Former Title					
Units	3				
Lecture Hours	48				
Laboratory Hours	None				
Arranged Hours	None				
Total Semester Contact Hours	None	<u>48</u>			

COURSE IDENTIFICATION NUMBER  
(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

An ecological study of mountain, canyon and desert ecosystems of the Southwestern United States. Animal and plant identification geology, and environmental problems will be emphasized. This is a field study course and includes overnight camping.

**Budget Unit** 16410

**Classification Code** Y

**Transfer Code** A-Transferable to both UC and CSU

**Method of Instruction** 60

**SAM Priority Code:** E - Non-Occupational

**Repeatability:** R1-R2 - Repeatable  
x1-x2

**TOPS Code:** 40100 - Biology,  
General

**Topics Course:** No

**Open Entry/Exit:** No

**Grading** Letter Grade or

<b>Options: P/NP</b> Curriculum Office Use Only.					
Department Chair Approval Date: <u>02/09/12</u> by: <u>Jubal Hampton</u> Divison Chair Approval Date: <u>05/03/12</u> by: <u>Phil Hughes</u> Curriculum and Instruction Council Chair Approval Date:					
<b>COURSE CONTENT</b> (Include major topics of the course, time required, and what the student is expected to learn.)  <del>-Require the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.</del>					
<b>Field Study</b>					
General ecology of deserts and mountains of Utah, Colorado, Arizona and New Mexico					
2. Geology		3	Geology of Southwest		
3. Flora and Fauna of the Southwest		6	Flora and Fauna of Southwestern deserts, canyons, and mountains		
9		9	4	5	Environmental impacts of strip mining, pollution, water diversions, and power plants
					8. Indians of the Southwest
					5

~~1. - Apply knowledge of terminology found in plant and animal keys of Southwestern ecosystem: Contrast Southwestern habitats of mountains and deserts.~~

~~1. - Describe the major habitats of mountain and desert environments of the Southwestern. Develop a working knowledge of appropriate field guides for animal and plant species of the Southwestern.~~

~~1. - Appreciate the diversity of habitats found in the Southwestern area. Appreciate the diversity of ecological life zones found in the Southwestern.~~

#7

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

This is a field study course and includes overnight camping.

SANTA ANA COLLEGE COURSE OUTLINE		
DISCIPLINE, NUMBER, TITLE: Biology 132, Natural History of Death Valley (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)		
CATALOG ENTRY		
Discipline	Biology	
Course Number	132	
Course Title	Natural History of Death Valley	
Former Title		
Units	1	
Lecture Hours	16	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>16</u>
		<b>Budget Unit</b>
COURSE IDENTIFICATION NUMBER(S) (C-ID)		
PREREQUISITE(S)		
<b>Prerequisite</b> None		
CATALOG DESCRIPTION		
Natural history of Death Valley emphasizing the biology of the plants and animals, their ecology, adaptations and evolutionary history, as well as the history of environmental change and human activities. <del>Mandatory orientation and field trip. May be repeated. Not offered every semester.</del>		

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	60
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	R2 - Repeatability x2
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	

Department Chair Approval Date: 02/06/12 by: Jubal Hampton  
 Division Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

This course will consist of 16 lecture hours that include the following topics. The approximate time spent on each topic is indicated:-

**Topic****Time required (hours)****Student expected to learn****Orientation**~~(2.5 hours~~

1. Orientation and trip logistics (1 hour)
2. Introduction to Death Valley

~~ecosystem~~

1. (1.5

~~Overview of course and Death Valley Ecosystem~~~~Camping in Death Valley (logistics of field trip)~~

+

~~Camping equipment needed and other logistics of the trip~~**Field trip****(13.5 hours)**~~Climate (~~

1. hour)

Field experience:

1. Climate of Death Valley (current and past)

~~of Death Valley~~

1. (2

---

~~1) Basic climatological principles 2) Reasons for dry climate in Death Valley 3) Climatic history of the Death Valley region~~

1. hours)

#8

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

This is a field study course and includes overnight camping.

<b>SANTA ANA COLLEGE COURSE OUTLINE</b> <b>DISCIPLINE, NUMBER, TITLE: Biology 133, Desert Biology</b> (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)		
<b>CATALOG ENTRY</b> Discipline Biology Course Number 133 Course Title Desert Biology Former Title Units 1 Lecture Hours 16 Laboratory Hours None Arranged Hours None Total Semester Contact Hours None <u>16</u>		<b>Budget Unit</b>
<b>COURSE IDENTIFICATION NUMBER(S) (C-ID)</b>  <b>PREREQUISITE(S)</b>  <b>Prerequisite</b> None  <b>CATALOG DESCRIPTION</b>  Study of desert organisms, their adaptions to arid conditions, their evolution, identification and ecology, and the impact of human activities on desert organisms, communities and ecosystems. <del>Mandatory orientation and field trip. May be repeated. Not offered every semester.</del>		

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	10
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	R2 - Repeatable x2
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	

Department Chair Approval Date: 02/09/12 by: Jubal Hampton  
 Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

---

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

This course will consist of 16 lecture hours that include the following topics

~~The approximate time spent on each topic is indicated:~~

-

-  
**Topic**  
**Time required (hours)**  
**Student expected to learn**  
**Orientation**

~~(2 hours:~~

1. Orientation and trip logistics (1 hour)
2. Introduction to Deserts ecosystems

+

~~Overview of desert environments and of the organisms that live in them  
 Camping in the desert (logistics of field trip)~~

+

~~Camping equipment needed and other logistics of the trip~~

**Field trip**  
**(14 hours)**

1. (1 hour)

Field experience:

1. Desert climate and the adaptations of organisms to cope with dry conditions (2

~~1) Basic climatological principles that affect the distribution of deserts in North America and the world~~

~~2) Physiological and behavioral adaptations of plants and animals to dry conditions~~

1. hours)
2. Identification of desert flora and fauna (4

~~1) Identify common plants and animals of the desert~~

1. hours)
2. Desert ecology (4

~~1) Understand how desert organisms interact: competition, mutualism, and predation~~

~~2) Understand the concept of food webs and keystone species~~

1. hours)
2. Evolution in desert organisms (2

~~1) Understand the phylogenetic relationships among desert species and between desert species and their non-desert dwelling relatives~~

1. hours)



#9

## Sonoran/Colorado Desert

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

## CATALOG ENTRY

Discipline	Biology	
Course Number	134	
Course Title	Natural History of the Sonoran/Colorado Desert	
Former Title		
Units	1	
Lecture Hours	16	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>16</u>

## COURSE IDENTIFICATION NUMBER(S) (C-ID)

## PREREQUISITE(S)

## Prerequisite

None

## CATALOG DESCRIPTION

Ecological study of the plants and animals of the Sonoran/Colorado Desert area of Southern California. This is a field study course and includes overnight camping.

Budget Unit	<u>16410</u>	
Classification Code	Y	
Transfer Code	A-Transferable to both UC and CSU	
Method of Instruction	60	
SAM Priority Code:	E - Non-Occupational	
Repeatability:	<del>R1</del> <u>R2</u> - Repeatable <del>x1</del> <u>x2</u>	
TOPS Code:	<u>40100 - Biology, General</u>	-
Topics Course:	No	
Open Entry/Exit:	No	
Grading Options:	<u>Letter Grade or P/NP</u>	

Curriculum Office Use Only.

Department Chair Approval Date: 02/09/12 by: Jubal Hampton

Division Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Requires the student to discern the biological and non-biological components of the Sonoran/Colorado Desert. Requires the student to distinguish the flora and fauna of the Sonoran/Colorado Desert. Requires the student to critically analyze data obtained from field trip experience and compile into a completed form:			
	<b>HOURS</b>		
Orientation	3	Field Trip (Minimum of 3 days)	13

1. - Apply knowledge of terminology found in plant and animal keys of Sonoran/Colorado Desert ecosystem. Contrast Sonoran/Colorado Desert habitats of mountains and deserts:

1. - Describe the major habitats of mountains and desert environments of the Sonoran/Colorado Desert areas. Develop a working knowledge of appropriate field guides for animal and plant species of the Sonora/Colorado Desert:

1. - Appreciate the diversity of habitats found in the Sonoran/Colorado Desert. Appreciate the diversity of ecological life zones found in the mountains and deserts of the Sonoran/Colorado Desert:

1. -

- Recognize the importance of understanding natural environments and work to preserve floral and faunal diversity:

1. - Integrate information in the course to develop a personal appreciation of nature. Employ information from the course for an individual's greater awareness to conserve wild and natural environments:

#### Communication Skills

-

##### 5 - Essential-always try to achieve

1. - Listen and comprehend lectures, and observe displays about biology of the Sonoran/Colorado Desert ecosystem. Read assigned material understanding vocabulary used in ecology. Discuss materials used in course; using correct terminology:

#### Thinking and Reasoning

-

#### Information Management

-

#### Diversity

-

#### Civic Responsibility

-

#### Life Skills

-

#### Careers

-

1. - Discuss careers in Federal and State agencies that involve preservation and conservation of the environment. Reading and Writing - Students will learn the basics of the technical vocabulary of biology.

2. Reading and Writing - Students will develop their ability to comprehend readings on biological subjects.

#### Thinking and Reasoning

##### 5 - Essential-always try to achieve

1. Critical Thinking - Students will develop their critical thinking skills by evaluating scientific evidence to reach valid conclusions.

#### Information Management

##### 1 - Not applicable-never try to achieve

#10

**Indians**

1. early native American to the 21<sup>st</sup> Century (2 hours)

SANTA ANA COLLEGE          PLAN OF INSTRUCTION  
 DISCIPLINE, NUMBER, TITLE: Biology 169, Natural History of the Sierra Nevadas  
 (If the discipline, number or title is being revised, above should reflect the NEW information.)

**COURSE MATERIALS**

Required texts and/or materials. (Include price and date of publication.)

**Required:** Laws, John Muir. *Laws Field Guide to the Sierra Nevada*, ed. Heyday, 2007, ISBN: 159714052X.  
**\$20**

and/or

**Required:** Beesley, D.. *Crow's Range: An Environmental History Of The Sierra Nevada* , ed. University of Nevada Press , 2004, ISBN: 0874175623. **\$40**

**Recommended readings and/or materials:**

**None**

**Other: None**

**Handouts**

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)

**STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

SANTA ANA COLLEGE          COURSE OUTLINE	
DISCIPLINE, NUMBER, TITLE: Biology 169, Natural History of the Sierra Nevadas	
(If the discipline, number or title is being revised, above should reflect the NEW information;)	
AND, the complete former course name MUST be included in the CATALOG ENTRY below.)	

**CATALOG ENTRY**

Discipline	Biology
Course Number	169
Course Title	Natural History of the Sierra Nevadas
Former Title	
Units	1 – 3
Lecture Hours	16 – 48

Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>16 - 48</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

A field study of the ecology, geology and history of the Sierra Nevada mountains. Animal and plant studies, environmental problems and wilderness preservation will be emphasized. This is a field study course and includes overnight camping.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	60
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	<del>R1</del> <u>R2</u> - Repeatability <del>x1</del> <u>x2</u>
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 02/09/12 by: Jubal Hampton

Divison Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)  
~~Require the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.~~

	HOURS
<b>FOR 1 UNIT</b>	-
<b>1. Orientation Meeting</b>	-
<b>FOR 2 UNITS</b>	-
<b>FOR 3 UNITS</b>	-

1. - Apply knowledge of terminology found in plant and animal keys of Sierra Nevada ecosystem:  
 Contrast mountain habitats of the Sierra Nevada mountains:

#11

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Biology 229, General Microbiology

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Biology
Course Number	229
Course Title	General Microbiology
Former Title	
Units	5
Lecture Hours	48
Laboratory Hours	96
Arranged Hours	None
Total Semester Contact Hours	144

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

Biology 109/109H and 109L, or 139, or 149, or 211, or 239, or 249, or Chemistry 119 or Chemistry 209.

CATALOG DESCRIPTION

Introduction to microorganisms, their classification, structure, biochemistry, growth, control and their interactions with other organisms and the environment. Designed for biology, preprofessional, and prenursing (BSN) majors.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	<u>40100 - Biology, General</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	Letter Grade or P/NP

Curriculum Office Use Only.

Department Chair Approval Date: 01/23/12 by: Kathleen Takahashi

Division Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Students will be required to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, Perform, explain and evaluate observations made and data collected during hands on work in the laboratory and/or the field. Correlate the relationships between structure and function, the interrelationships between organisms and the environment and identify and apply the principles and techniques which are relevant to solve a given biological problem. Results and/or observation and conclusions based upon the data.

3 Hours: Introduction to Course; Introduction to Microbiology; Review of Chemistry.

3 Hours: Exploration of the Macromolecular structure and function; Exploration of the cell and subcellular organelles; Identification of the differences between the prokaryotic and eukaryotic cell.

3 Hours: Continued discussion of the prokaryotic vs. eukaryotic cells; Discussion of physical and chemical structures influencing microbial growth.

3 Hours: Classification and Identification of fungi, protozoa and prokaryotes.

3 Hours: Microbial Metabolism - including enzymes structure and specificity, enzyme inhibition, biochemical pathways of energy production including fermentation, aerobic and anaerobic respiration.

3 Hours: Microbial Genetics - genetic structure of prokaryotes and eukaryotes, as well as DNA replication schemes, RNA transcription, protein translation, and operon regulation.

3 Hours: Viruses and Biotechnology - viral structure, classification, and life cycle. Biotechnology will include a discussion of the current biotech techniques and components derived from microbes.

3 Hours: Epidemiology and Pathogenicity - exploration of the cause, spread and virulence factors associated with infectious diseases.

3 Hours: Immunity - non-specific and specific including, cell mediated vs. humoral immunity and acquired vs. passive immunity.

3 Hours: Applied Immunology and Antimicrobials - discussion of how the principles of immunology have been applied to facilitate testing. The development and mechanisms of actions for antimicrobials will also be addressed.

3 Hours: Pathogenic Bacteria - gram positive and gram negative pathogenic bacteria will be discussed, including virulence, transmission, diagnosis and treatment.

3 Hours: Pathogenic Viruses - pathogenic DNA and RNA viruses will be discussed, including virulence, routes of transmission, diagnosis and treatment.

3 Hours: Parasites - parasitic protozoa and helminths will be discussed, including host range endemic regions, and life cycles.

#12

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Medical Assistant 001, Cooperative Work Experience Education - Occupational

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Medical Assistant	
Course Number	001	
Course Title	Cooperative Work Experience Education - Occupational	
Former Title		
Units	1 - <del>4</del> 16	
Lecture Hours	None	
Laboratory Hours	<del>360</del>	<u>60 - 1200</u>
Arranged Hours	None	
Total Semester Contact Hours	<del>360</del>	<u>60 - 1200</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

~~Prerequisite None~~

MA 051A with a minimum grade of C

MA 055 with a minimum grade of C

CATALOG DESCRIPTION

Supervised paid or volunteer experience in student's major including new or expanded responsibilities. Units are earned based on the number of hours worked per semester: ~~75-149 hours = 1 unit; 150-224 hours = 2 units; 225-299 hours = 3 units and 300-360 hours = 4 units~~ 60 hours of nonpaid work hours = 1 unit; 75 hours of paid work hours = 1 unit. Maximum units per semester is 6. May be repeated. ~~grade~~ Grade: Pass/No Pass only.

Budget Unit	<u>16630</u>
Classification Code	Y
Transfer Code	C-Not transferable
Method of Instruction	40
SAM Priority Code:	C - Occupational

Repeatability: ~~R3 - Repeatable x3~~

VR - May Be Repeated up to maximum units

TOPS Code: 120820 - Administrative Medical

Assstng  
**Topics Course:** No  
**Open Entry/Exit:** No  
**Grading Options:** P/NP Only  
 Curriculum Office Use Only.

Department Chair Approval Date: 04/09/12 by: Catherine Emley  
 Divison Chair Approval Date: 05/07/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

### COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

1. Orientation (3 hours): course learning objectives and course requirements.
2. Completion of the state mandated forms (2 hours): 1) Cooperative Work Experience Education Regulations, 2) Application/Agreement, 3) Performance Objectives & 4) Semester Time Sheet.
3. Earned units of Cooperative Work Experience are based on the number of hours worked per semester: 75-149 hours = 1 unit; 150-224 hours = 2 units; 225-299 hours = 3 units; 300-360 hours = 4 units.
4. Develop learning objectives which ensure the student will objectives for the student to develop skills in a new aspect of the job which promotes occupation promotes occupational or educational goals.
5. Identify new or expanded responsibilities or learning opportunities beyond those experienced previously.
6. Promote professional work habits and customer service skills.
7. Discuss avenues of growth for upward mobility on the job. 7
8. Determine which new skills will be developed, and the number of hours to be worked each week, to earn 1-4 units of college credit. 8
9. Complete the Performance Objectives and Semester Time Sheet and gather the necessary information to demonstrate how completion of the objectives are measured. 9
10. "Wrap-Up" session (1 hour) during week sixteen of the semester with instructor & peers to process the student learning objectives.

SANTA ANA COLLEGE PLAN OF INSTRUCTION  
 DISCIPLINE, NUMBER, TITLE: Medical Assistant 001, Cooperative Work Experience Education - Occupational

(If the discipline, number or title is being revised, above should reflect the NEW information.)

### COURSE MATERIALS

Required texts and/or materials.(Include price and date of publication.)

#### Recommended readings and/or materials:

**Chabner, Davi-Ellen (2010). The Language of Medicine. (9th Edition). ISBN: 1437705707. Price: \$72.00**  
**Lindh, Wilburta Q. (2009). Comprehensive Medical Assisting, Administrative and Clinical Competencies. (4th Edition). ISBN: 9781-4354-1914-8. Price: \$70.00.**  
**Morrison, Terri (2006). Kiss, Bow or Shake Hands. ISBN: 1593373686. Price: \$14.00.**  
**Robbins, Stephen P. (2008). Training in Interpersonal Skills. ISBN: 0132354993. Price: \$27.00**

Other: None

Medical office scrubs/uniform, comfortable work shoes and a SAC identification badge.

WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS COURSE.)



#13

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Medical Assistant 054, Medical Insurance and Billing Forms  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Medical Assistant
Course Number	054
Course Title	Medical Insurance and Billing Forms
Former Title	Preparation of Medical Insurance Forms
Units	3
Lecture Hours	48
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>48</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

~~Prerequisite-None~~

MA 051A with a minimum grade of C

CATALOG DESCRIPTION

Instruction in the rules, regulations, and completion of medical insurance forms for Medicare, Medi-Cal, Tricare, MediMedi, State Disability, Worker's Compensation and private commercial insurance carriers. Includes legal and ethical guidelines, and instruction in procedure coding using current procedural terminology and ICD-9-CM.

<b>Budget Unit</b>	<u>16630</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	C-Not transferable
<b>Method of Instruction</b>	- <u>10</u>
<b>SAM Priority Code:</b>	C - Occupational
<b>Repeatability:</b>	- <u>NR - Non-Repeatabe: D, F, NC, W</u>
<b>TOPS Code:</b>	120820 - Administrative Medical Assstng
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 04/09/12 by: Catherine Emley

Divison Chair Approval Date: 05/07/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

### † 1. Career as an Insurance Billing specialist (3 hours)

- a. Role of the Insurance Billing Specialist: Job titles and responsibilities
- b. Educational and Training requirements
- c. Personal and professional qualifications
- d. Medical etiquette
- e. Medical ethics

f. Confidential communications: ~~Privileged and non-privileged information~~ Privileged & non-privileged information

- g. Professional liability: ~~fraud, abuse, compliance programs, embezzlement~~

embezzlement

### 2. Fundamentals of Health Insurance Coverage (3 hours)

- a. Health insurance contracts: group, individual, and prepaid health plans ~~—b~~

- b. Legal principles of insurance

- 1) Insurance policy
- 2) Case management requirements

c. Policy terms and financial obligations: premium, deductible, ~~coinsurance~~ coinsurance and copayment, guarantor, coordination of benefits

- d. Insurance coverage and benefits

- e. Physician/Patient contract

- 1) private and managed care patients
- 2) Assignment of benefits
- 3) Employment and disability examinations
- 4) Workers' compensation patients
- 5) Termination of physician/patient contract

- f. Types of health insurance programs

- 1) Government plans: CHAMPVA, Medicaid, Medicare, TRICARE
- 2) Managed care contracts
- 3) Private Insurance
- 4) Workers' compensation
- 5) Disability income insurance
- 6) Unemployment compensation ~~disability~~

disability

### 3. Source Documents and the Insurance Claim Cycle (3 hours)

- a. The reimbursement cycle

- b. Source documents

- 1) Patient registration form
- 2) Insurance identification card

#14

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Physics 279, College Physics I

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Physics	
Course Number	279	
Course Title	College Physics I	
Former Title	General Mechanics, Heat and Sound	
Units	4	
Lecture Hours	48	
Laboratory Hours	48	
Arranged Hours	None	
Total Semester Contact Hours	<del>None</del>	<u>96</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

Mathematics 160 with a grade of C or better. ~~Mathematics 160, (May be taken concurrently):~~

CATALOG DESCRIPTION

A trigonometry-based physics course. Topics include: mechanics, thermodynamics, fluids, oscillatory motion, and sound.

<b>Budget Unit</b>	<u>16435</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	190200 - Physics, General
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 05/01/12 by: John Kalko

Divison Chair Approval Date: 05/07/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

Lecture, class discussion, demonstrations, problem solving, reading and problem assignments, and laboratory.

### Lecture Content:

Introductory Material (Units, Scientific Notation, Significant Figures, Dimensional Analysis, Vectors, Unit Vectors, Component Forms, Addition and Subtraction of Vectors) - 3 hours

Motion in One and Two Dimensions (Displacement, Velocity, Acceleration, Kinematics, Free Fall, Projectile Motion, Uniform Circular Motion, Relative Motion) - 6 hours

Newton's Laws of Motion (Inertia, Forces, Weight, Normal Force, Applications of Newton's 2nd Law, Action-Reaction Pairs, Newton's Third Law, Static and Kinetic Friction, Centripetal Force) - 6 hours

Energy (Scalar Products, Work, Work Done by a Varying Force, Power, Kinetic Energy, Work - Kinetic Energy Theorem, Potential Energy, Gravitational and Elastic Potential Energy, Conservation of Energy, Work Done by Non-Conservative Forces, Work-Energy Theorem) - 4.5 hours

Momentum (Momentum, Impulse, Conservation of Linear Momentum in Collisions, Center of Mass, Motion of the Center of Mass of a System of Particles) - 4.5 hours

Rotational Motion (Rotational Kinematics, Rotational Energy, Moment of Inertia, Paralles-Axis Theorem, Torque, Vector Cross Products, Newton's 2nd Law for Rotations, Rolling without Slipping, Angular Momentum, Conservation of Angular Momentum, Static Equilibrium) - 6.0 hours

Gravity (Newton's Law of Gravity, Kepler's Laws, Energy in Orbits) - 1.5 hours

Harmonic and Wave Motion (Harmonic Force, Simple Pendulum, Physical Pendulum, Mechanical Waves, Wave Interference, Sound Waves, Doppler Effect, Harmonic Waves on Strings and in Tubes) - 6.0 hours

Fluids (Density, Pressure, Pascal's Principle, Buoyancy, Flow of Incompressible Fluids) - 3.0 hours

Thermodynamics (Temperature, Ideal Gas Law, Thermal Expansion, Heat, Phase Changes, Thermodynamic Work, Processes, Cycles, 1st Law of Thermodynamics, Heat Engines and Refrigerators, Carnot Cycle, Entropy) - 7.5 hours

48 Lecture Hours Total

### Laboratory Content:

1. Introduction to lab procedures and report writing.
2. Data Analysis Techniques.
3. Estimation and propagation of error.
4. A minimum of 12 experiments from the following categories:

SANTA ANA COLLEGE/Continuing Education COURSE OUTLINE APPROVAL SHEET

DISCIPLINE, NUMBER, TITLE: ENGLISH AS A SECOND LANGUAGE 580, Conversation 2

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

\* NEW REVISION WITH X W/O CATALOG CHANGES
DELETION REVISION WITH X W/O CLASS SCHEDULE CHANGES

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

CATALOG ENTRY (60 word limit; underline changes if a revision)

Course Number: ENGLISH AS A SECOND LANGUAGE 580

Course Title: Conversation 2

Credits: 0

Class hours: 72

Prerequisite: None

For students interested in obtaining a practical degree of fluency in spoken English. This course focuses on the further analysis of conversational strategies including verbal and nonverbal communication within large and small groups. Further analysis of conversation strategies. Includes verbal and nonverbal communication within large and small groups or between two people. Emphasizes differences between formal and colloquial language, based on American attitudes and culture. Recommended for Intermediate ESL 2 and Intermediate ESL 3 students. Open entry/open exit.

CLASS SCHEDULE ENTRY (maximum of four lines; underline changes if a revision)

ENGLISH AS A SECOND LANGUAGE 580, Conversation 2. 0 Units.

For students interested in obtaining a practical degree of fluency in spoken English. This course focuses on the further analysis of conversational strategies including verbal and nonverbal communication within large and small groups. Further analysis of conversation strategies. Includes verbal and nonverbal communication within large and small groups or between two people. Emphasizes differences between formal and colloquial language, based on American attitudes and culture. Recommended for Intermediate ESL 2 and Intermediate ESL 3 students. Open entry/open exit.

INFORMATION IN THIS SECTION MUST BE COMPLETED BEFORE SUBMISSION TO A CURRICULUM COMMITTEE

Major Code N/A For this major, is the course Required Elective

Does this course have arranged hours? Yes No N/A X By course

Co/Prerequisite\*? N/A X Approval Code Co/Prerequisite Course Requirement

Co/prerequisite message (10 character limit, (SEE CATALOG)

Is course cross-listed (same as) with another course? Yes No X Subject ID

Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)

Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes N/A X

List departments notified

Budgetary Unit 18200 Classification Code K Transfer Code 0 SAM Priority Code E

Method of Instruction\*\* 11 Instructor LHE: Lecture X Laboratory

If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOP CODE: 4930.86

Proposed by Henry Kim Date: 4-16-12

Division Dean Dr. Sergio R. Sotelo, Ph.D. Date: 4-17-2012

Curriculum Committee Approval Date: 4/17-2012

Curriculum Council Approval Date Subject ID Number ESL-580

(Signatures indicate review and approval of any advisory co/prerequisites as per Board Policy) Noncredit Category Code A

DISCIPLINE, NUMBER, TITLE: ENGLISH AS A SECOND LANGUAGE 580, Conversation 2

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Course Number: **ENGLISH AS A SECOND LANGUAGE 580**

Course Title: **Conversation 2**

Credits: 0

Class hours: 72

Prerequisite: None

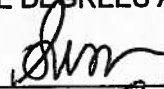
For students interested in obtaining a practical degree of fluency in spoken English. This course focuses on the further analysis of conversational strategies including verbal and nonverbal communication within large and small groups. Emphasizes differences between formal and colloquial language, based on American attitudes and culture. Recommended for Intermediate ESL 2 and Intermediate ESL 3 students. Open entry/open exit.

COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES

N/A

Yes   X   No

SAC Department Chair Susan Gaer

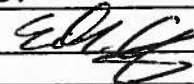


Date

4/16/12

Yes   X   No

SCC Department Chair Eden Quimzon



Date

4/18/12

SANTA ANA COLLEGE COURSE OUTLINE APPROVAL SHEET

DISCIPLINE, NUMBER, TITLE: Secondary Subjects High School Subjects 010, Learning Skills and Strategies

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

Table with 4 columns: \* NEW, REVISION WITH, W/O, CATALOG CHANGES. Includes rows for DELETION and CLASS SCHEDULE CHANGES.

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

CATALOG ENTRY (60 word limit; underline changes if a revision)

Course Number: Secondary Subjects: High School Subjects 010

Course Title: Learning Skills and Strategies

Credits: 5

Class hours: 72

Prerequisite: None

Provides individualized and direct group instruction to improve learning strategies and basic reading, writing, and mathematics skills. Equips Prepares adults who have verified learning disabilities to successfully meet educational and vocational goals. Recommended for students who meet eligibility requirements for D.S.P.S. services.

CLASS SCHEDULE ENTRY (maximum of four lines; underline changes if a revision)

SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS 010, LEARNING SKILLS AND STRATEGIES. 5 Credits. Provides individualized and direct group instruction to improve learning strategies and basic reading, writing, and mathematics skills. Equips Prepares adults who have verified learning disabilities to successfully meet educational and vocational goals. Recommended for students who meet eligibility requirements for D.S.P.S. services.

Major Code N/A For this major, is the course Required Elective

Does this course have arranged hours? Yes No N/A X By course

Co/Prerequisite\*? N/A X Approval Code Co/Prerequisite Course Requirement

Co/prerequisite message (10 character limit, (SEE CATALOG)

Is course cross-listed (same as) with another course? Yes No X Subject ID

Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)

Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes N/A X

List departments notified

Budgetary Unit 18200 Classification Code K Transfer Code N/A SAM Priority Code E

Method of Instruction\*\* Instructor LHE: Lecture X Laboratory

If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOP Code: 4930.30

Proposed by Mary Stephens & Kristina De La Cerda Date: May 2012

Division Dean Chris Kosko Date: May 2012

Curriculum Committee Approval Date: May 2012

Curriculum Council Approval Date Subject ID Number HSS-010

(Signatures indicate review and approval of any advisory co/prerequisites as per Board Policy) Noncredit Category Code C

DISCIPLINE, NUMBER, TITLE: Secondary Subjects High School Subjects 010, Learning Skills and Strategies

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Course Number: Secondary Subjects: High School Subjects 010

Course Title: Learning Skills and Strategies

Credits: 5

Class hours: 72

Prerequisite: None

Provides individualized instruction to improve learning strategies and basic reading, writing, and mathematics skills. Prepares adults who have verified learning disabilities to successfully meet educational and vocational goals. Recommended for students who meet eligibility requirements for D.S.P.S. services.

**COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES**

N/A X

Yes No SAC Department Chair May Skye Date 5/30/12  
 Yes No SCC Department Chair n/a Date \_\_\_\_\_

**COURSE CONTENT**

(Include major topics of the course time required\*, and what the student is expected to learn.)

Major Topics	Time Required	What Students Will Learn
Unit 1: Learning Compensatory Strategies	8 hours	<ul style="list-style-type: none"> <li>Time-management skills (use and maintain a student schedule)</li> <li>Methods to prepare and study for tests effectively</li> <li>Take clear lecture notes in class</li> <li>Identify and develop areas of academic strength</li> </ul>
Unit 2: Assistive Technology	10 hours	<ul style="list-style-type: none"> <li>Independently use various assistive technology programs to compensate for areas of academic weakness</li> </ul>
Unit 3: Goal Setting	10 hours	<ul style="list-style-type: none"> <li>Identify the values, standards, &amp; resources which influence personal goals</li> <li>Define realistic short- and long-term goals</li> <li>Recognize personal benefits and positive affirmations to reinforce goal attainment</li> </ul>
Unit 4: Perceptual & Memory Skills	8 hours	<ul style="list-style-type: none"> <li>Categorize and successfully use memory skills, such as repetition, categorization, graphic organizers, and acronyms to recall information</li> </ul>
Unit 5: Current Events	8 hours	<ul style="list-style-type: none"> <li>Determine key current events within a newspaper</li> <li>Create an outline detailing who, what, when, where, and why self-reflection questions related to a news story</li> <li>Write a clear paragraph (at least five sentences) describing the details of a news story</li> </ul>



DISCIPLINE, NUMBER, TITLE: SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173, Basic Consumer Math 1B

(If the discipline, number or title is being revised, above should reflect the NEW information ;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

* NEW	REVISION WITH	<u>X</u>	W/O	CATALOG CHANGES
DELETION	REVISION WITH	<u>X</u>	W/O	CLASS SCHEDULE CHANGES

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

CATALOG ENTRY (60 word limit; underline changes if a revision)  
 Course Number SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173  
 Course Title: Basic Consumer Math 1B  
 Credits: 5  
 Class hours: 72  
 Prerequisite: None

Students will use practical computational skills to solve common problems in a consumer's life, buying or renting a car, car insurance, automobile expenses, buying or renting a home, utilities expenses, home improvements, traveling costs, budgeting household expenses, banking and investing, paying taxes, real estate and sales taxes, and preparing for careers. Open entry/open exit

CLASS SCHEDULE ENTRY (maximum of four lines; underline changes if a revision)  
SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173, Basic Consumer Math 1B. 5 credits

Students will use practical computational skills to solve common problems in a consumer's life, buying or renting a car, car insurance, automobile expenses, buying or renting a home, utilities expenses, home improvements, traveling costs, budgeting household expenses, banking and investing, paying taxes, real estate and sales taxes, and preparing for careers. Open entry/open exit

INFORMATION IN THIS SECTION MUST BE COMPLETED BEFORE SUBMISSION TO A CURRICULUM COMMITTEE

Major Code N/A For this major, is the course Required                      Elective                       
 Does this course have arranged hours? Yes No N/A X By course                       
 Co/Prerequisite\*? N/A X Approval Code                      Co/Prerequisite Course Requirement                       
 Co/prerequisite message (10 character limit, (SEE CATALOG)                       
 Is course cross-listed (same as) with another course? Yes                      No X Subject ID                       
 Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)  
 Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes                      N/A X  
 List departments notified                       
 Budgetary Unit 18200 Classification Code K Transfer Code N/A SAM Priority Code E  
 Method of Instruction\*\* 11 Instructor LHE:                      Lecture X Laboratory                       
 If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOPS CODE 4930.62

Proposed by Elaine Pham *Elaine Pham* Date: April 30, 2012  
 Division Dean Christine Kosko *C Kosko* Date: April 30, 2012  
 Curriculum Committee Approval Terry Kim *Terry Kim* Date: April 30, 2012  
 Curriculum Council Approval Date                      Subject ID Number HSMTH-173

(Signatures indicate review and approval of any advisory co/prerequisites as per Board Policy) Noncredit Category Code C

**SANTA ANA COLLEGE/Continuing Education COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: **SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173, Basic Consumer Math 1B**

(If the discipline, number or title is being revised, above should reflect the NEW information ;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY:**

Course Number: **SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173**

Course Title: **Basic Consumer Math 1B**

Credits: **5**

Class hours: **72**

Prerequisite: **None**

Students will use practical computational skills to solve common problems in a consumer's life including home improvements, traveling costs, budgeting household expenses, banking and investing, paying real estate and sales taxes, and preparing for careers. **Open entry/open exit**

**COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES**

N/A x

Yes	No	SAC Department Chair	<u>Susan Garnett <i>Susan Garnett</i></u>	Date	<u>04/30/2012</u>
Yes	No	SCC Department Chair	_____	Date	_____

#19

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Art 196A, 3D Modeling Fundamentals

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Art	
Course Number	196A	
Course Title	3D Modeling <u>Fundamentals</u>	
Former Title	3-D Modeling <u>Fundamentals</u>	
Units	5	
Lecture Hours	48	
Laboratory Hours	96	
Arranged Hours	None	
Total Semester Contact Hours	<del>None</del>	<u>144</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

Art 195.

CATALOG DESCRIPTION

Instruction in digital 3D modeling using 3D Studio Max from introductory to high-intermediate level. Course includes orientation to the software interface, lectures and tutorials on how to build objects using primitives, modifiers, polygonal and Spline modeling methods. Emphasis on practical application in games, architecture, and film. (~~Same as Television/Video Communications 181~~).

<b>Budget Unit</b>	<u>15510</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	C - Occupational
<b>Repeatability:</b>	R1 - Repeatable x1
<b>TOPS Code:</b>	<u>61440 - Animation</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 11/14/11 by:Sharon Brown

Divison Chair Approval Date: 04/26/12 by:Eve Kikawa

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

**1. 3 lec. 6 lab. Clarification of methodology of instruction, course assignments, and areas of commercial application for 3d modeling. Course and industry overview, and introduction to software.**

Introduction of the software interface.

Introduction to 3d Studio Max's interface.

Introduction to Primitive and Extended Primitive tools.

Changing the Basic Parameters of primitive objects through the Modify Command Panel.

Move objects around in a 3d environment with the Move Transform Tool.

Navigating with the mouse buttons, and spinner.

**2. 3 lec. 6 lab. Managing Files and Objects. Modifiers.**

Topics include saving files, approaches to 3d modeling, aligning objects, using modifiers.

**3. 3 lec. 6 lab. Recreating from Reference.**

Provide feedback on students models.

Difference between templates and reference.

Approaches to replicating from reference.

Cloning; instances versus copies.

Linking, Grouping, and Selection sets.

Optimizing.

**4. 3 lec. 6 lab. Edit Poly Modeling of Organic Objects.**

#19

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE  
 DISCIPLINE, NUMBER, TITLE: Art 197A, 3D Animation Fundamentals  
 (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Art
Course Number	197A
Course Title	3D Animation <u>Fundamentals</u>
Former Title	3D Animation <u>Fundamentals</u>
Units	5
Lecture Hours	48
Laboratory Hours	96
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>144</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

Prerequisite

Art 196A or ~~Television/Video Communications 181.~~

CATALOG DESCRIPTION

Instruction in using 3d animation software for the purpose of linear storytelling. Emphasis on the incorporation of the classic principles of animation, and in learning the core components of the software that are necessary for effective visual communication. (~~Same as Television/Video Communications 185.~~)

<b>Budget Unit</b>	<u>15510</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	C - Occupational
<b>Repeatability:</b>	R1 - Repeatable x1
<b>TOPS Code:</b>	<u>61440 - Animation</u>
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 11/14/11 by: Sharon Brown

Divison Chair Approval Date: 04/22/12 by: Eve Kikawa

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

**1. 3 lec. 6 lab. Making moving art.**

What can you animate in Max, basic animation terms, and concepts.

Understanding the track view, editing keys.

Making a ball bounce.

**2. 3 lec. 6 lab. Animation basics.**

Provide feedback on student's animations.

Introduction to the "Principles of Animation."

Discussion of pitches and animation shorts.

**3. 3 lec. 6 lab. Animation basics - in action.**

Provide feedback on student's animations.

How to communicate with gesture, timing and motion.

Setting up animations for easier editing with dummies.

Using the Morpher modifier.

**4. 3 lec. 6 lab. Cinematography techniques.**

Provide feedback on student's animations.

Traditional camera techniques discussed, and cross-referenced with Max's tool set.

**5. 3 lec. 6 lab. Timing.**

Provide feedback on student's animations.

Adjusting timing of the parts and the whole.

Control the speed, and change the length of your animation using the time configuration dialog.

**6. 3 lec. 6 lab. Procedural controllers; noise, wave, and sound controllers.**

Provide feedback on student's animations.

**7. 3 lec. 6 lab. Complex movements.**

Provide feedback on student's animations.

Compound controllers.

**8. 3 lec. 6 lab. Editing and movie file formats.**

Provide feedback on student's animations.

Introduction to Video Post for combining clips and rendering movies.

Using Smart Sound.

File formats.

**9. 3 lec. 6 lab. Making a 30 second animated movie.**

Structuring a 30 second animation.

Production tools: milestone time line, asset list, storyboard.

**10. 3 lec. 6 lab. Launching the production.**

Provide feedback on student's animation ideas.

**11. 3 lec. 6 lab. Animate with the path constraint controller.**

Provide feedback on student's animations.

**12. 3 lec. 6 lab. Hierarchies.**

Provide feedback on student's animations.

Inverse kinematics versus forward kinematics.

When to use each and how.

**13. 3 lec. 6 lab. Morphing.**

Provide feedback on student's animations.

Using the morpher modifier for facial animation, eye and eyelid rigging.

**14. 3 lec. 6 lab. Look at constraint.**

Provide feedback on student's animations.

**15. 3 LC. 6 lab. Link constraint.**

#20

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Dance 130, Dance Improvisation

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Dance	
Course Number	130	
Course Title	Dance Improvisation	
Former Title		
Units	1	
Lecture Hours	8	
Laboratory Hours	24	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>32</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

None

CATALOG DESCRIPTION

An introduction to structured dance improvisation emphasizing movement invention and structural intuition, creative problem solving, group dynamics of working in small and large groups and concepts of weight dependency and contact improvisation. Prior completion of dance technique course highly recommended.

<b>Budget Unit</b>	<u>15520</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	30

**SAM Priority Code:** E - Non-Occupational  
**Repeatability:** R3 - Repeatable x3  
**TOPS Code:** 100800 - Dance  
**Topics Course:** No  
**Open Entry/Exit:** No  
**Grading Options:** Letter Grade or P/NP  
 Curriculum Office Use Only.

Department Chair Approval Date: 04/16/12 by: Eve Kikawa  
 Divison Chair Approval Date: 04/22/12 by: Eve Kikawa  
 Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

<u>1. Introduction to the process of improvisation and its skills of concentration and focus.</u>	3 lab	<u>A. To learn skills of how to listen, see and respond on a physical level through movement.</u>
	1 lec	
	2 lab	<u>B. To develop discipline and concentration.</u>
	1 lec	
<u>2. Creative Problem Solving</u>		<u>A. Definition of CPS</u> <u>B. Applying Model to Dance Improv</u>
<u>3. Contact Improvisation Weight Dependency: Physically explore concepts and ideas of contact, weight support, and lifting within a duet or group context.</u>	6 lab	<u>A. To learn and execute basic supported movement as part of a duet, trio, or large group.</u>
	2 lec	<u>B. To increase an understanding of the anatomical principles involved in the act of lifting and/or being lifted.</u>
		<u>C. Ability to communicate verbally and kinesthetically within the context of contact improvisation.</u>
<u>4. Improvisation: Explore concepts of space, shape and time through a series of structured improvisations, which will guide,</u>	10 lab	<u>A. To increase improvisational skills of making conscious choices and reacting with spontaneous movement.</u>
	3 lec	<u>B. To engage student's</u>



#21

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Dance 204A, Dance Production

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Dance
Course Number	204A
Course Title	Dance Production
Former Title	
Units	3
Lecture Hours	16
Laboratory Hours	104
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>120</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

**Prerequisite**

Audition.

CATALOG DESCRIPTION ~~For students interested in performing in the SAC dance concert~~

Concert Dance production experience culminating in public performances in Phillips Hall Theater as part of the Spring Student/Faculty Dance Concert. Includes production basics, with an emphasis on working with faculty/student choreographers ~~on to create~~ original dances. Focus on performance techniques.

<b>Budget Unit</b>	<u>15520</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	100800 - Dance
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 04/16/12 by: Eve Kikawa

~~Divison Chair Approval Date: 04/22/12 by: Eve Kikawa~~

Curriculum and Instruction Council Chair Approval Date:

COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

~~ALL ACTIVITIES REQUIRE CRITICAL THINKING. PROJECTS, READING AND WRITTEN ASSIGNMENTS REQUIRE APPLICATION OF THEORIES AND CONCEPTS PRESENTED IN CLASS; INCLUDING ANALYSIS, DESCRIPTION INTERPRETATION, AND ORGANIZATIONAL SKILLS. 1. Introduction Techniques for taking auditions + lee successfully. Experiencing auditions Auditions~~

#22

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

**SANTA ANA COLLEGE COURSE OUTLINE**

**DISCIPLINE, NUMBER, TITLE:**Dance 204B, Dance Production

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Dance
Course Number	204B
Course Title	Dance Production
Former Title	
Units	3
Lecture Hours	16
Laboratory Hours	104
Arranged Hours	None
Total Semester Contact Hours	None <u>120</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**

**PREREQUISITE(S)**

**Prerequisite**

Dance 202A or 202B and Audition.

**CATALOG DESCRIPTION**~~For students interested in~~

Concert Dance production experience for students creating and producing original choreography for and/or performing in the SAC dance concert. Includes production basics with an emphasis on creating, rehearsing and performing dances. Focus on choreography.

<b>Budget Unit</b>	<u>15520</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code:</b>	100800 - Dance
<b>Topics Course:</b>	No
<b>Open Entry/Exit:</b>	No
<b>Grading Options:</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 04/16/12 by:Eve Kikawa

Divison Chair Approval Date: 04/22/12 by:Eve Kikawa

Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

~~ALL ACTIVITIES REQUIRE CRITICAL THINKING. PROJECTS, READING AND WRITTEN ASSIGNMENTS REQUIRE APPLICATION OF THEORIES AND CONCEPTS PRESENTED IN CLASS; INCLUDING ANALYSIS, DESCRIPTION INTERPRETATION, AND ORGANIZATIONAL SKILLS.~~

1. Introduction Techniques

~~for taking auditions~~

~~for running and judging auditions successfully. Experiencing auditions Auditions~~

~~2-lee in~~

Lecture: 2 hrs. |Lecture on audition requirements for various dance techniques

~~jazz~~

~~such as jazz, ballet, modern, tap. Determination of intent. Results from audition, as decided by faculty~~

~~choreographers~~

~~supervisors and student choreographers, will be~~

~~an-nounced~~

~~announced. Each student's individual responsibilities and commitments for the concert will be defined.~~

~~Lab session:~~

~~Auditions~~

~~\_3 hrs~~

~~lab~~

~~Audition Experience. Personal assessment of ability to and first meetings with 3.5 hrs arr perform in audition situation. Under-choreographers. standing of choreographers intent.~~

2. Repertory and working with dancers in rehearsal

Lecture: 3 hours

Guidelines for being an effective choreographers.

~~dancer in rehearsal. 3-lee~~

How a choreographer prepares for and runs a rehearsal. Evaluation of dance during rehearsal process. How to work with different

~~choreographers~~

~~choreographers. Techniques on how to capture the style and quality of a dance. Increasing the students knowledge and background in dance through the learning of repertory. How to perform a dance piece at concert level.~~

~~Lab session:~~

~~Rehearsal and 9 hrs lab~~

9 hours

~~Rehearsal : Awareness of process of developing development of dances. Ability to help a choreographer develop a role. 10.5 hrs arr a dance.~~

~~Ability to help a choreographer develop a role.~~

#23

Click on the changed parts for a detailed description. Use the left and right arrow keys  
to walk through the modifications.

last

SANTA ANA COLLEGE COURSE OUTLINE  
DISCIPLINE, NUMBER, TITLE: Dance 206A, Modern Dance I  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND,  
the complete former course name MUST be included in the CATALOG ENTRY below.)

## CATALOG ENTRY

Discipline	Dance
Course Number	206A
Course Title	Modern Dance I
Former Title	
Units	2
Lecture Hours	16
Laboratory Hours	48
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>64</u>

## COURSE IDENTIFICATION NUMBER(S) (C-ID)

## PREREQUISITE(S)

**Prerequisite**

None

## CATALOG DESCRIPTION

An introduction to modern dance emphasizing movement technique, dance vocabulary and creative individual expression. Includes an introduction to choreographic principles and cultural context of modern dance. Students learn modern dance exercises and short works of dance. ~~Video, concerts, and master classes enrich the course.~~ Prepares the student for Dance 206B.

<b>Budget Unit</b>	<u>15520</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code:</b>	E - Non-Occupational
<b>Repeatability:</b>	<del>R3-R2</del> - Repeatable <del>x3-x2</del>
<b>TOPS Code:</b>	100800 - Dance
<b>Topics Course:</b>	No

**Open Entry/Exit:** No  
**Grading Options:** Letter Grade or P/NP  
Curriculum Office Use Only.

Department Chair Approval Date: 04/16/12 by:Eve Kikawa  
Divison Chair Approval Date: 04/22/12 by:Eve Kikawa  
Curriculum and Instruction Council Chair Approval Date: 05/07/2012

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

### I. 1 lec.—Course—

Course overview. Definition of modern dance.

Lecture on the following topics:

1. Course requirements, goals, major course segment.
2. Definition of modern dance.
3. Importance of individualized pre-warmup and how to develop it.

### 2II. 4-4 lec. 9 lab\*\*.

Floor exercises:

1. Stretches for back, legs and hips.
2. Use of parallel and turnout positions.
3. Battements.
4. Contractions sitting and lying down.
5. Hips spirals.
6. Side curves, tilts and arches.
7. Movement combinations.

Skills learned in lab sessions:

1. Correct alignment of hip and spine.
2. Correct placement for body twists and curves.
3. Understanding of and ability to do contractions.
4. Greater flexibility and strength.
5. Ability to control torso through stomach and back muscles.
6. Ability to perform successional movement.

Lecture on the following topic:

1. Basic understanding of the musculoskeletal system.
2. The use of floor work in modern dance as a means of developing major muscles of the torso and understanding variations of inversions.
3. ~~Comparison~~ The use of floor work characteristics of Graham, Hawkins, Nikolais in modern dance as a means of developing Free Flow and Weight Sensing.
4. The use of contraction/release as a movement initiator in modern dance.
5. Proper way to stretch muscles.

### 3III. 4 lec. \*\*12 lab.

#24

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

SANTA ANA COLLEGE COURSE OUTLINE

DISCIPLINE, NUMBER, TITLE: Music 162, Class Piano II

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Discipline	Music
Course Number	162
Course Title	Class Piano II
Former Title	
Units	1
Lecture Hours	16
Laboratory Hours	16
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>32</u>

COURSE IDENTIFICATION NUMBER(S) (C-ID)

PREREQUISITE(S)

~~Prerequisite Music 061 or~~

MUS 161 ;

CATALOG DESCRIPTION

Group instruction for those possessing basic piano skills, but still classified as beginners. Emphasizes note reading, keyboard technique, chord patterns, sightreading. Daily practice required. Practice pianos available on campus. Required for music majors whose principal instrument is not piano.

**Budget Unit** 15535

**Classification Code** Y  
**Transfer Code** A-Transferable to both UC and CSU  
**Method of Instruction** 30  
**SAM Priority Code:** E - Non-Occupational  
**Repeatability:** NR - Non-Repeatable: D, F, NC, W  
**TOPS Code:** 100400 - Music  
**Topics Course:** No  
**Open Entry/Exit:** No  
**Grading Options:** Letter Grade or P/NP  
Curriculum Office Use Only.

Department Chair Approval Date: 04/04/12 by: Brian Kehlenbach

Divison Chair Approval Date: 04/26/12 by: Eve Kikawa

Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

The student must learn to perform physical actions to demonstrate in sound the mental conception derived from reading the score. This complex skill involves correct music reading skills, the development of musical concepts based on reading the score, and the ability to match actual performance to concept. To do this requires critical thinking at both verbal and non-verbal levels.

1. 3 lec 3 lab

Review:

5-finger patterns C, G, and F

tonic, dominant 7th, and subdominant chords in C, G, and F

interval reading

counting in duple, triple and quadruple meters.

Student reviews and perfects essentials of 5-finger, 2-handed keyboard technique and reading basic notation.

2. 3 lec 3 lab

New concepts and techniques:

keys of D, A, and E major

reading LH and RH of similar difficulty simultaneously

harmonizations in D, A, and E

Playing Evaluation



#25

first

*Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.*

last

## PROGRAM OF STUDY

Pharmacy Technology Degree (sac.phar.as) and Advanced Certificate Option (sac.phar.ca) A.S. Degree

The associate degree and Advanced Certificate options include the full-spectrum training required for employment in all pharmacy practice settings. Upon completion of the associate degree or Advanced Certificate, graduates will meet the academic training requirements for licensing with the California State Board of Pharmacy. Graduates will also be well prepared for the Pharmacy Technician Certification Board exam.

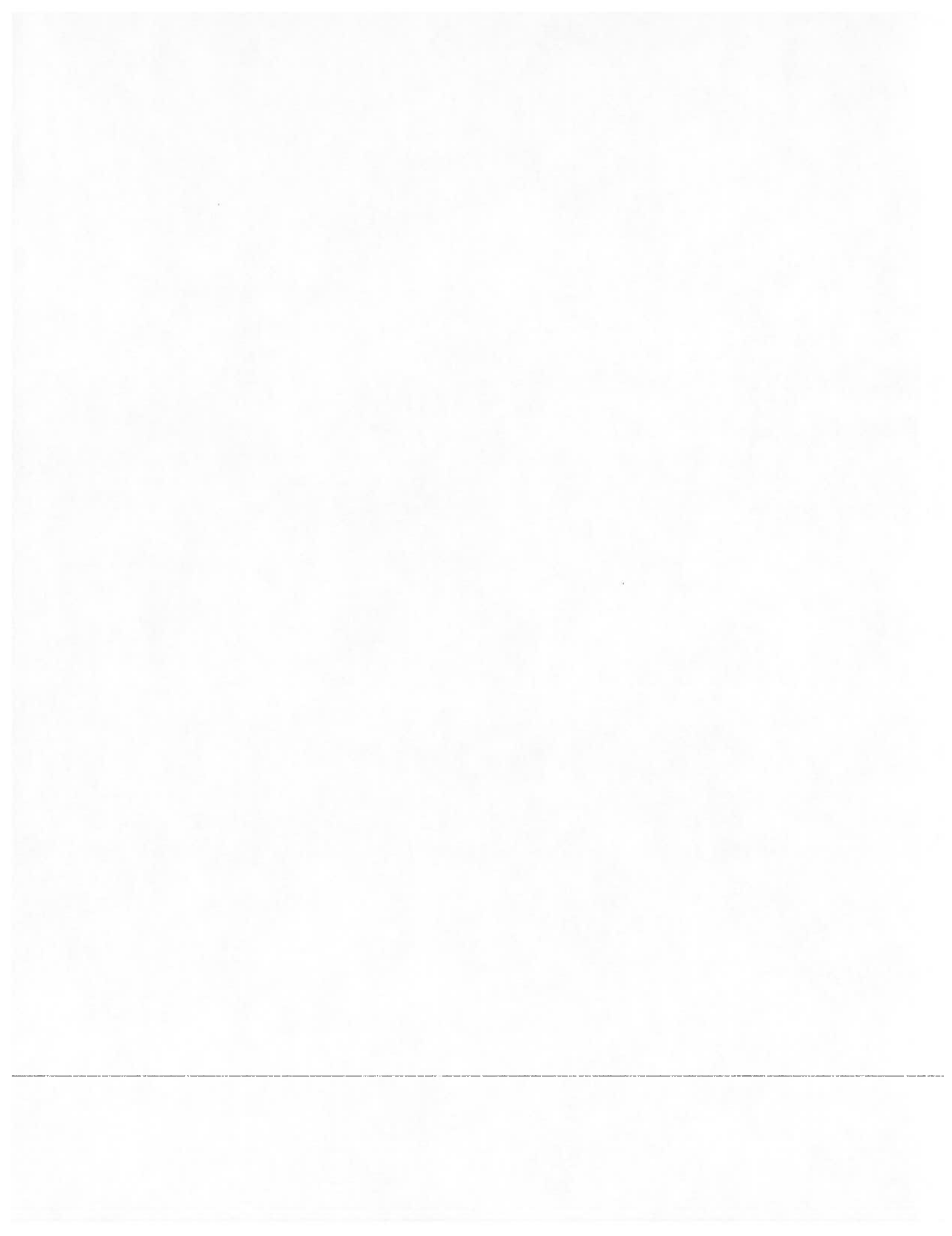
The major course requirements for the associate degree and the Advanced Certificate option consist of the ~~same 15~~ same 16.5 units of coursework listed in the Basic Certificate option, including the one unit outpatient externship rotation. In addition to completing two additional academic courses (PHAR 057 and PHAR 060), students choosing the associate degree or Advanced Certificate option must perform 240 additional hours (three additional units) of externship, involving rotations in inpatient and sterile products pharmacy services. Students will be placed in the hospital and/or home infusion setting to complete these rotations. Background checks, health screenings, and/or drug testing may be required prior to externship placement. Any required investigations are done at the student's expense.

The associate degree and Advanced Certificate options are accredited by the American Society of Health-System Pharmacists (ASHP). ~~With the exception of Pharmacy Technology 061, students~~ Students must complete each required course with a grade of "C" or better (PHAR 061 and externship with a grade of "CR") to qualify for the associate degree or the Advanced Certificate.

Major requirements for the ~~associate degree and the Advanced Certificate~~

<u>Required Course</u>		-	<u>: 26</u> <u>units</u>	<u>Units</u>
PHAR 048	Introduction to Pharmacy Technology	2		
PHAR 051	Body Systems I	3.5		
PHAR 052	Body Systems II	3.5		
PHAR 054	Pharmacy Calculations	2		
PHAR 056	Pharmacy Operations	4.5		
PHAR 057	Inpatient Pharmacy Services	1.5		
PHAR 060	Sterile Products	4.5		
PHAR 061	Pharmacy Technology Skills Lab	0.5		
PHAR 072	Pharmacy Technology Externship	0.5 - 4		
			<u>26</u>	
<u>Recommended electives</u>		-		<u>Units</u>
BIOL 139	Health Microbiology	4		
BIOL 149	Human Anatomy and Physiology	4		
BA 038	Telephone Techniques	0.5		
BA 110	Computer Keyboarding Skills	1 - 2		
BA 115	Computer Keyboarding Speed and Accuracy Development	1 - 2		
CHEM 109	Chemistry in the Community	4		

CHEM 119	Fundamentals - General and Organic	5	
CMPR 100	The Computer and Society	3	
PHAR 064	New Drug Update	1	
PHAR 080	Pharmacy Calculations Review	2	
	and		
PHAR 084	Sterile Products Update	4.5	
<u>SPCH</u> <u>CMST</u> 097	American English Conversational Skills	3	
<u>CMST</u> <u>101</u>	<u>Introduction to Interpersonal Communication</u>	<u>3</u>	
	or		
<u>SPCH</u> <u>CMST</u> 101H	Honors Introduction to Interpersonal Communication	3	
-	or		
<u>SPCH</u> <u>CMST</u> 102	Public Speaking	3	
-	or		
<u>SPCH</u> <u>CMST</u> 107	Communication for the Health Care Professional	1.5 - <u>0</u>	
Total Units		<del>54</del> 61	<u>26</u>
PID 162351			



#26

first

*Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.*

last

## PROGRAM OF STUDY

**Pharmacy Technology Basic Certificate Option (sac. pharb.cert) Certificate of Proficiency (Untranscribed)**

The Basic Certificate option prepares students for entry-level employment as a pharmacy technician in the retail pharmacy sector. By completing the Basic Certificate option, students will meet the minimum academic training requirements for licensing as specified by the California State Board of Pharmacy.

Students who intend to complete only the Basic Certificate option will be placed for a minimum of 80 hours of externship in an outpatient (drug store or ambulatory care clinic) pharmacy site to gain workplace experience. Background checks, health screenings, and/or drug testing may be required prior to externship placement. Any required investigations are done at the student's expense.

The Basic Certificate option is not accredited by the American Society of Health-Systems Pharmacists (ASHP). Students who earn the Basic Certificate and then continue through the Advanced Certificate will be designated as having completed an ASHP-accredited program.

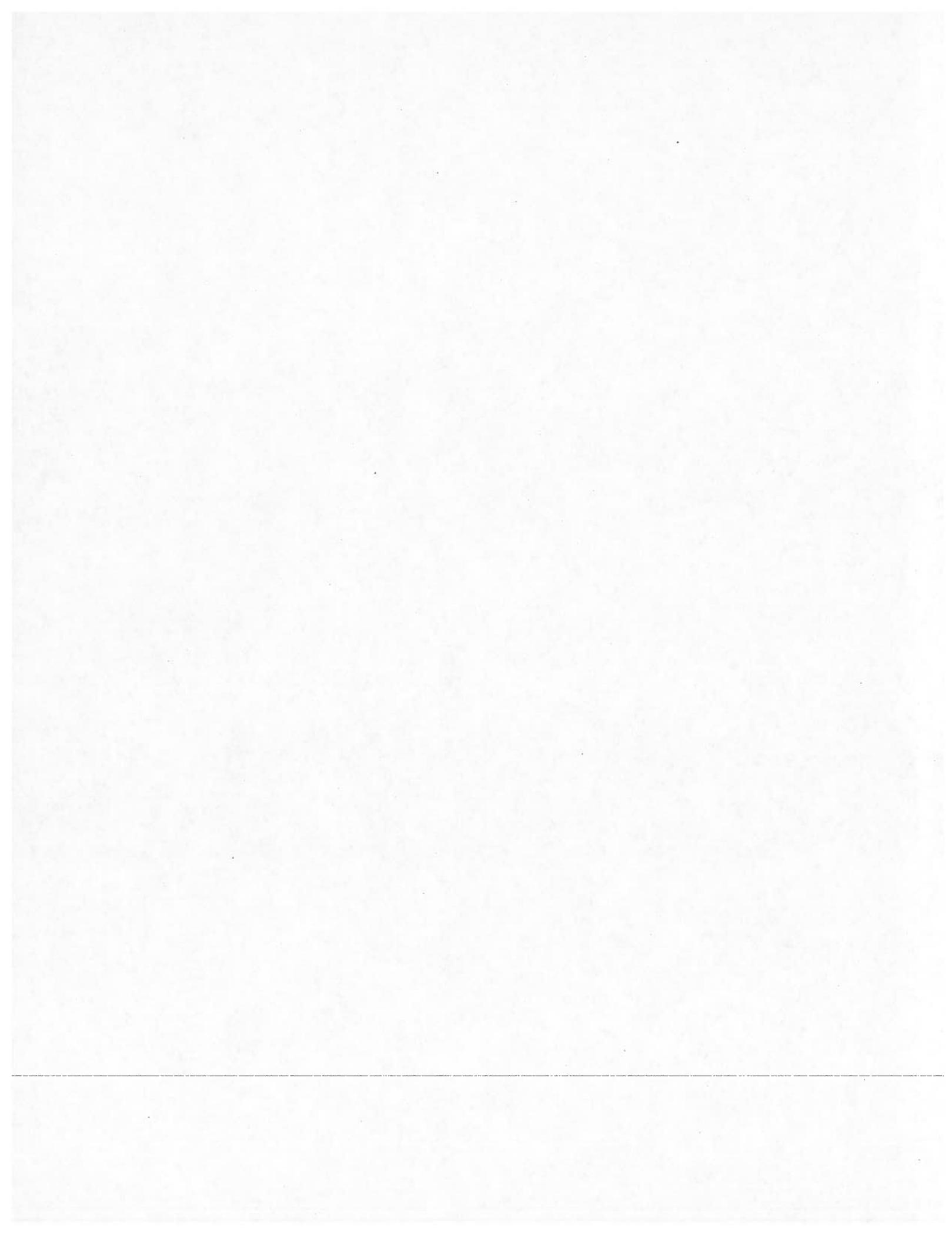
Students must complete each required course with a grade of "C" or better (Externship with a grade of "CR") to qualify for the Basic Certificate

Major requirements for the Basic Certificate option:

Course		-
<u>Required Courses: 16.5 units</u>		<u>Units</u>
PHAR 048	Introduction to Pharmacy Technology	2
PHAR 051	Body Systems I	3.5
PHAR 052	Body Systems II	3.5
PHAR 054	Pharmacy Calculations	2

PHAR 056	Pharmacy Operations	4.5	
PHAR 072	Pharmacy Technology Externship	0.5 - 4	
-			16.5
-			
Recommended electives		-	<u>Units</u>
BIOL 139	Health Microbiology	4	
BA 038	Telephone Techniques	0.5	
BA 110	Computer Keyboarding Skills	1 - 2	
BA 115	Computer Keyboarding Speed and Accuracy Development	1 - 2	
CHEM 109	Chemistry in the Community	4	
CHEM 119	Fundamentals - General and Organic	5	
CMPR 100	The Computer and Society	3	
PHAR 061	Pharmacy Technology Skills Lab	0.5	
PHAR 064	New Drug Update	1	
	and		
PHAR 080	Pharmacy Calculations Review	2	
<u>SPCH</u> <u>CMST</u> 101	Introduction to Interpersonal Communication	3	
	or		
<u>SPCH</u> <u>CMST</u> 101H	Honors Introduction to Interpersonal Communication	3	
-	and		

<u>SPCH</u> <u>CMST</u> <u>102</u>	<u>Public Speaking</u>	<u>3</u>
<u>CMST</u> <u>107</u>	<u>Communication for the Health Care Professional</u>	<u>1.5</u>
<b>Total Units</b>		<del>41</del> 48
		PID 161
<u>16.5</u>		
		PID 350





### PROGRAM OF STUDY

## Associate of Arts in Kinesiology for Transfer A.A-T Degree for Transfer

The Associate in Arts in Kinesiology for Transfer (AA-T) prepares students to move into curriculum at a four-year institution leading to a baccalaureate degree in Kinesiology. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU, Fullerton, in the Kinesiology major. See page \_\_\_\*\*\_\_\_ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AA-S) degrees. Upon completion of the AA-T in Kinesiology students will have a general understanding of the anatomy, physiology, and mechanics of human movement. Students will gain knowledge and movement-based experience which prepares them to pursue a degree in exercise science, nutrition, health promotion, sports medicine-athletic training, physical therapy, and coaching or fitness related fields.

<b>Core Courses: 11 units</b>		<b>Units</b>
KNPR 101	Introduction to Kinesiology	3
BIOL 239	General Human Anatomy	4
BIOL 249	Human Physiology	4

<b>Movement Based Courses: 3 units required</b>		<b>Units</b>
Select a maximum of one (1) course from any three (3) of the following areas for a total of three units.		
		3 - 3

<b>Aquatics</b>		<b>Units</b>
KNAQ 201	Swimming	1
	or	
KNAQ 204	Lifesaving	1.5
	or	
KNAQ 206	Lap Swimming	1
	or	
KNAD 211	Adapted Aquatics	1
	or	
KNAC 133	Off Season Swimming	1
	or	
KNAF 160	Aqua Aerobics	1

<b>Combatives</b>		<b>Units</b>
KNAF 156	Cardio Boxing	1 - 0
	or	
KNAC 140	Karate	1
	or	
KNAC 155	Self-Defense	1
	or	
KNAC 185	Aikido	1

<b>Dance</b>		<b>Units</b>
DNCE 110	Beginning Mexican Folk Dance	1
	or	
DNCE 111	Intermediate Mexican Folk Dance	1
	or	
DNCE 112	Ethnic Dance	1

	<b>or</b>		
DNCE 113A	Flamenco Dance I		1
	<b>or</b>		
DNCE 113B	Flamenco Dance II		1
	<b>or</b>		
DNCE 117	Introduction to Middle Eastern Dance		1
	<b>or</b>		
DNCE 118	Introduction to Caribbean and Latin Dance Styles		1
	<b>or</b>		
DNCE 119A	Introduction to Jazz Dance		1
	<b>or</b>		
DNCE 119B	Introduction to Jazz Dance		1
	<b>or</b>		
DNCE 120	Introduction to Hip-Hop Dance		1
DNCE 121	Intermediate Hip-Hop Dance		1
	<b>or</b>		
DNCE 123	Introduction to Salsa Dance		1
	<b>or</b>		
DNCE 124	Intermediate Salsa Dance		1
DNCE 206A	Modern Dance I		2
	<b>or</b>		
DNCE 206B	Modern Dance II		2
	<b>or</b>		
DNCE 201A	Ballet I		2
	<b>or</b>		
DNCE 201B	Ballet II		2
	<b>or</b>		
DNCE 215A	Tap Dance I		2
	<b>or</b>		
DNCE 215B	Tap Dance II		2
	<b>or</b>		
DNCE 216	Tap Dance III		2
<b>Fitness</b>			<b>Units</b>
KNFI 101	Personal Fitness Evaluation		1
	<b>or</b>		
KNFI 102	Personal Fitness Evaluation		2
	<b>or</b>		
KNFI 103	Performance Evaluation for Athletes		1
	<b>or</b>		
KNFI 110	Circuit Training		1
	<b>or</b>		
KNFI 115	Cardiovascular Conditioning		1
	<b>or</b>		
KNFI 116	Summer Circuit Training for Summer Fitness		1 - 0
	<b>or</b>		

KNFI 120	Strength Lab	1
	or	
KNFI 124	Conditioning for Athletes-Men	1
	or	
KNFI 125	Conditioning for Football, Defense	1
	or	
KNFI 126	Upper Body Development for Athletes	1.5
	or	
KNFI 127	Lower Body Development for Athletes	1.5
	or	
KNFI 128	Conditioning for Athletes-Women	1
	or	
KNFI 145	Weight Training for Women	1
	or	
KNFI 147	Weight Training Co-Ed	1
	or	
KNAC 123	Personal Fitness Training	1
	or	
KNAC 150	Hatha Yoga	1
	or	
KNAC 170	Yoga	1
	or	
KNAC 235	Speed and Agility	1
	or	
KNAF 140	Walking/Jogging for Fitness	1
	or	
KNAF 143	Extreme Fitness	1
	or	
KNAF 144	Cross Training	1
	or	
KNAF 146	Stability Ball Training for Fitness	1
	or	
KNAF 150	Stretch, Flex and Tone	1
	or	
KNAF 155	Aerobics	1
	or	
KNAF 157	Cardio Pump	1
	or	
KNAF 158	Step Aerobics	1
	or	
KNAD 202	Adapted Circuit Training	1 - 0
	or	
KNAD 208	Adapted Aerobic Fitness	1 - 0

**Individual Sports**

KNAC 107	Badminton	Units 1
----------	-----------	------------

	or	
KNAC 130	Golf	1
	or	
KNAC 132	Golf-Playing Lesson	1
	or	
KNAC 134	Golf-Playing Lesson - Off Season	1
	or	
KNAC 141	Women's Tennis Off-Season Activities	1
	or	
KNAC 160	Tennis	1
	or	
KNAC 169	Wrestling	1
	or	
KNAC 171	Wrestling - Off-Season	1
	or	
KNAC 280	Track and Field	1
	or	
KNAC 281	Track and Field - Off Season	1
	or	
KNIA 203	Cross Country-Men	3
	or	
KNIA 205	Golf-Men	3
	or	
KNIA 206	Swimming-Men	3
	or	
KNIA 208	Track and Field-Men	3
	or	
KNIA 210	Wrestling-Men	3
	or	
KNIA 214	Golf-Women	3
	or	
KNIA 215	Tennis-Women	3
	or	
KNIA 217	Swimming-Women	3
	or	
KNIA 218	Track-Women	3
	or	
KNIA 219	Cross Country-Women	3
<b>Team Sports</b>		<b>Units</b>
KNAC 183	Pom Squad	1
	or	
KNAC 184	Pom Performance Squad	1
	or	
KNAC 200	Intramural Sports- Basketball	1
	or	

KNAC 202	Basketball Off Season or	1
KNAC 210	Baseball or	1
KNAC 211	Baseball - Off Season or	1
KNAC 220	Basketball or	1
KNAC 226	Water Polo or	1
KNAC 227	Off Season Waterpolo or	1
KNAC 231	Football Fall Camp or	1
KNAC 232	Football or	1
KNAC 236	Advanced Baseball Game Skills or	1
KNAC 240	Advanced Basketball Skills-Men or	1
KNAC 245	Advanced Basketball Skills-Women or	1
KNAC 261	Soccer-Women or	1
KNAC 262	Soccer-Men or	1
KNAC 265	Indoor Soccer or	1
KNAC 270	Softball or	1
KNAC 271	Softball - Off Season or	1
KNAC 290	Volleyball or	1
KNAC 291	Volleyball - Off Season or	1
KNAC 292	Advanced Volleyball-Women or	1
KNIA 201	Baseball Men or	3
KNIA 202	Basketball-Men or	3
KNIA 204	Football-Men or	3
KNIA 209	Water Polo-Men or	3

KNIA 211	Softball-Women or	3
KNIA 212	Basketball-Women or	3
KNIA 213	Volleyball-Women or	3
KNIA 216	Soccer-Men or	3
KNIA 220	Soccer-Women or	3
KNIA 221	Water Polo-Women or	3
KNIA 222	Badminton-Women	3 - 0

**Elective Units: 7.5-9 units – Please select 2 courses from the following lists.**

		<b>Units</b>
MATH 219	Statistics and Probability or	4
MATH 219H	Honors Statistics and Probability or	4
SOCS 219	Statistics and Probability or	4
SOCS 219H	Honors Statistics and Probability or	4
CHEM 210	General, Organic and Biochemistry or	5
CHEM 219	General Chemistry or	5
CHEM 219H	Honors General Chemistry or	5
PHYS 279	College Physics I or	4
PHYS 210	Principles of Physics I or	4
PHYS 217	Engineering Physics I or	4
KNHE 105	First Aid and Personal Safety and	1.5
KNHE 107	Cardiopulmonary Resuscitation	2

**Total Units**

**21.5 - 23**

PID 356

#28

first

Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.

last

**Electives**

**PROGRAM OF STUDY**

Medical Assistant - Administrative / Clinical Degree (sac.ma.as) and ?/  
Certificate (sac.ma.ca) A.A. Degree

The associate degree and certificate curriculum for medical assistant administrative/clinical is designed to prepare a student for employment in a medical office, a hospital business office, a clinic, or allied health facility. Careers are available as medical assistants, front and back office; insurance secretaries, admitting clerks, medical records clerks and receptionists in all medical facilities.

Course content includes medical terminology; medical typing, computer techniques and skills; medical forms, reports, and charts; medical insurance, billing and collections, bookkeeping; effective human relations as related to a medical office; clinical procedures such as giving injections, sterilizing instruments, monitoring vital signs, assisting with minor surgery, instrument identification; and professional ethics and legal aspects.

Graduates will be qualified to assist doctors in clinical situations or function under the direct supervision of a medical doctor. Graduates will also be qualified to perform all clerical duties normally required in the medical office, hospital business office, clinics, and allied health facilities.

<b>Course</b>		-
<b>Medical Assistant Degree Option:</b>		-
<b>Major requirements for the Associate Degree in Arts or Science Degree and Certificate:</b>		-
MA 051A	Beginning Medical Terminology	3
-	<u>and</u>	
MA 051B	Advanced Medical Terminology	3
-	<u>and</u>	
MA 053	Medical Assistant - Administrative Front Office	3

-	<u>and</u>	
MA 054	Medical Insurance and Billing Forms	3
-	<u>and</u>	
MA 055	Medical Assistant - Clinical Back Office	3
-	<u>and</u>	
BUS 080	Business Mathematics	3 - 0
<b>Electives</b>		<b>3</b>
-		
-	<u>and</u>	
-		
-		<b>18</b>
-		
<b>Elective must be selected from the following courses</b>		<b>Units</b> : -
BA 179	Introduction to Microsoft Office	3
-	<u>or</u>	
BA 180	Advanced Microsoft Office	3
-	<u>or</u>	
BA 183	Microsoft Word	3
-	<u>or</u>	
BA 184	Advanced Microsoft Word for the Workplace	3
-	<u>or</u>	
MA 020	Bloodborne and Airborne Pathogen Standards	0.5
-	<u>or</u>	
MA 056	Computer Applications for the Medical Office	3
<b>Recommended electives:</b>		
MA 001	Cooperative Work Experience Education - Occupational	1 - 4 <u>16</u>
-	<u>or</u>	
MA 020	Bloodborne and Airborne Pathogen Standards	0.5
-	<u>or</u>	



MA 056	Computer Applications for the Medical Office	3
-	<u>or</u>	
MA 098	Topics	2
Requirements for the certificate:		
-		
Course		-
MA 051A	Beginning Medical Terminology	3
-	<u>and</u>	
MA 051B	Advanced Medical Terminology	3
-	<u>and</u>	
MA 053	Medical Assistant - Administrative Front Office	3
-	<u>and</u>	
MA 054	Medical Insurance and Billing Forms	3
-	<u>and</u>	
MA 055	Medical Assistant - Clinical Back Office	3
-		<u>15 -</u>
-		<u>15</u>
Total Units		<del>39.5</del> 45.5
		PID 148
<u>34 - 52</u>		
		PID 355