California State University San Marcos • NEW COURSE • FORM C VSAR 411

ORIGINATOR'S SECTION:

1. College:

☒ CHABSS ☐ CoBA
☐ CoEHHS ☐ CSM

Desired Term and Year of Implementation (e.g., Fall 2008):

Fall 2017

2.Course is to be considered for G.E.? (If yes, also fill out appropriate GE form*) ☒ Yes ☐ No (Specific topics may request G.E. certification)

3. Course will be a variable-topics (generic) course? ☐ Yes ☒ No
("generic" is a placeholder for topics)

4. Course abbreviation and Number: ~~AMD~~ VSAR **411 Data Visualization**

5. Title: ***(Titles using jargon, slang, copyrighted names, trade names, or any non-essential punctuation may not be used.)***
Data Visualization

6. Abbreviated Title for PeopleSoft:
(no more than 25 characters, including spaces)
Data Visualization

7. Number of Units: 3

8. Catalog Description: ***(Not to exceed 80 words; language should conform to catalog copy. Please consult the catalog for models of style and format; include all necessary information regarding consent for enrollment, pre- and/or corequisites, repeated enrollment, crosslisting, as detailed below. Such information does not count toward the 80-word limit.)***

Provides the technological tools for telling the story of information, using techniques and principles from art and design. An examination of how communicative strategies, such as flow charts, idea maps, graphics, animations, movies, and performances can convey complex subject-specific information. Emphasizes translating data in multiple media and stretching the story-telling potential of information plotting.

9. Why is this course being proposed?
AMD 411 will be an upper division studio elective in Arts, Media & Design. This course is also a natural elective for general education students and students of other disciplines to learn data visualization for the communication of research, the creation of research posters and presentations of research.

10. Mode of Instruction*
For definitions of the Course Classification Numbers:
http://www.csusm.edu/academic_programs/curriculumscheduling/catalogcurricula/DOCUMENTS/Curricular_Forms_Tab/Instructional%20Mode%20Conventions.pdf

Type of Instruction	Number of Credit Units	Instructional Mode (Course Classification Number)
Lecture	2	C2
Activity		
Lab	1	C7

11. Grading Method:*
☒ Normal (N) *(Allows Letter Grade +/-, and Credit/No Credit)*
☐ Normal Plus Report-in-Progress (NP) *(Allows Letter Grade +/-, Credit/No Credit, and Report-in-Progress)*
☐ Credit/No Credit Only (C)
☐ Credit/No Credit or Report-in-Progress Only (CP)

12. If the (NP) or (CP) grading system was selected, please explain the need for this grade option.

13. Course Requires Consent for Enrollment? ☐ Yes ☒ No

☐ Faculty ☐ Credential Analyst ☐ Dean ☐ Program/Department - Director/Chair

14. Course Can be Taken for Credit More than Once? ☐ Yes ☒ No
If yes, how many times? (including first offering)

15. Is Course Crosslisted: ☐ Yes ☒ No

If yes, indicate which course and check "yes" in item #22 below.

16. Prerequisite(s): ☐ Yes ☒ No

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BY:

* If Originator is uncertain of this entry, please consult with Program/Department Director/Chair.

17. Corequisite(s): ☐ Yes ☒ No

18. Documentation attached:
☒ Syllabus ☐ Detailed Course Outline

19. If this course has been offered as a topic, please enter topic abbreviation, number, and suffix:*

20. How often will this course be offered once established? 1-2 times / academic year

PROGRAM DIRECTOR/CHAIR - COLLEGE CURRICULUM COMMITTEE SECTION:
(Mandatory information – all items in this section must be completed.)

21. Does this course fulfill a requirement for any major (i.e., core course or elective for a major, majors in other departments, minors in other departments)? ☒ Yes ☐ No

Catalog copy is attached. 9/26/16.

If yes, please specify:
UD Studio elective for Arts, Media and Design.

See attached email.

22. Does this course impact other discipline(s)? ***(If there is any uncertainty as to whether a particular discipline is affected, check "yes" and obtain signature.)*** ☐ Yes ☒ No

If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.

Discipline _____ Signature _____ Date _____ Support _____ Oppose

Discipline _____ Signature _____ Date _____ Support _____ Oppose

SIGNATURES : (COLLEGE LEVEL) :

Lucy HG Solomon 1/20/2016
1. Originator (please print or type name) Date

M J Kilpatrick 4·13·16
2. Program Director/Chair Date

4/13/16
3. College Curriculum Committee Date

Martha Stoddard Holmes 4/13/16
4. College Dean (or Designee) Date

(UNIVERSITY LEVEL)

5. UCC Committee Chair Date

6. Vice President for Academic Affairs (or Designee) Date

7. President (or Designee) Date

* If Originator is uncertain of this entry, please consult with Program/Department Director/Chair.

Criselda Yee

From: Lucy HG Solomon
Sent: Wednesday, September 14, 2016 7:17 PM
To: Angela Baggett
Cc: Jacquelyn Kilpatrick; Martha Stoddard Holmes; Criselda Yee
Subject: Re: question about C forms VSAR 121, 251, 318, and 411

Hi all, this is the information for each course:

Question #21

VSAR 121 - yes
This course fulfills one of the required LD critical theory requirements for the Visual and Performing Arts major, Visual Arts option.

VSAR 251 - yes
This course fulfills one of the required LD critical theory requirements for the Visual and Performing Arts major, Arts and Technology option.

VSAR 411 - yes
This course will fulfill UD Studio elective requirements for the Visual and Performing Arts major, Arts and Technology option.

VSAR 318 - yes
This course fulfills UD Studio requirements for the Visual and Performing Arts major, Arts and Technology option.
Additionally, there were minor changes that I inserted into a C2 from for VSAR 318 that perhaps could be addressed more easily by updating the C-form, at this stage. Those adjustments are
1) removing the prerequisite
2) allowing the course to be taken for credit more than once (2 times, including first offering)

Thank you!
Lucy

Lucy HG Solomon
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On Sep 14, 2016, at 4:42 PM, Angela Baggett <abaggett@csusm.edu> wrote:

Lucy and Jacque,

On the C forms VSAR 121, VSAR 251, VSAR 318, and VSAR 411 that moved forward to Academic Programs, they called to inquire about question #21 which asks:

21. Does this course fulfill a requirement for any major (i.e., core course or elective for a major, majors in other departments, minors in other departments)? Yes No

If yes, please specify:

California State University, San Marcos | School of Arts
Course Number ~~AMD~~ VSAR 411
Course Title Data Visualization
| **Draft Syllabus**

I. Course Description

Provides the technological tools for telling the story of information, using techniques and principles from art and design. An examination of how communicative strategies, such as flow charts, idea maps, graphics, animations, movies, and performances can convey complex subject-specific information. Emphasizes translating data in multiple media and stretching the story-telling potential of information plotting.

II. Student Learning Objectives for General Educational Area

Upon successful completion of the course, students should be able to:

- Communicate effectively in writing to various audiences
  This outcome is measured by assessment of students' data visualization analyses.
- Think critically and analytically about an issue, idea or problem
  This outcome is measured by assessment of students' data visualization journal, in which they demonstrate critical thinking in their investigations into ways that information is depicted, based on the originator's position on a subject.
- Find, evaluate and use information appropriate to the course and discipline
  This outcome is measured by data visualization assignments requiring data collection, data interpretation and, ultimately, data visualization.

Student Learning Objectives for the course

Upon successful completion of the course, students should be able to:

- Understand and apply principles of data visualization
  This outcome is measured by assessment of students' data visualizations.
- Acquire, parse, and analyze abstract data sets
  This outcome is measured by students' data visualization statements.
- Design custom data visualizations of subject-specific material
  This outcome is measured by assessment of students' data visualization projects.
- Analyze existing visualizations with regard to information and societal narratives
  This outcome is measured by assessment of students' data visualization analyses.

III. Topics / Schedule

The following is a list of course topics and weekly schedule.

- **Week 01:** Course Introduction, Terminology
- **Week 02:** Basic Charts and Plots, Multivariate Data Visualization
- **Week 03:** Principles of Perception, Color, Design, and Evaluation
- **Week 04:** Text Data Visualization
- **Week 05:** Interactivity and Animation
- **Week 06:** Temporal Data Visualization
- **Week 07: MIDTERM EXAM**
- **Week 08:** *Spring Break, No Classes*
- **Week 09:** Geospatial Data Visualization
- **Week 10:** Visualization Case Studies
- **Week 11:** Redesign Principles and Design Dimensionality
- **Week 12:** Hierarchical Data Visualization
- **Week 13:** Network Data Visualization
- **Week 14: FINAL PROJECT**
- **Week 15:** Project Prototype Demonstrations
- **Week 16:** Ethics and Aesthetics
- **Finals Week:** Final Project Poster Session

IV. Registration Restrictions.

This is an upper division elective and there are no registration restrictions.

V. Writing Requirement

The writing requirement will be fulfilled by the following writing assignments: information journal (entries on on-line viewing and data visualization creations), reading assessment, data visualization analysis, and article discussion.

VI. Texts

Now You See It, chapters 1-3
S. Card, J. Mackinlay and B. Shneiderman, *Readings in Information Visualization, Using Visualization to Think* Morgan Kaufmann, 1999, pp. 1-34.

Additional Papers
S. K. Card, "Information visualization." In *The Human-Computer Interaction Handbook*, J. Jacko, A. Sears, (editors), Lawrence Erlbaum Associates, 2003.

J.-D. Fekete, J. van Wijk, J. Stasko, C. North, "The Value of Information Visualization", in *Information Visualization: Human-Centered Issues and Perspectives*, (Editors: A. Kerren, J. Stasko, J.-D. Fekete, C. North), Springer, 2008, pp. 1-18.

C. North, "Information Visualization", in *Handbook of Human Factors and Ergonomics*, G. Salvendy (editor), John Wiley & Sons, 2005.

VII. Grading Components and Assignment Weight

Students will be evaluated based on participation as well as on assignments and collaborative assignments, as well as a mid-term and final.

Graded items include:

Data Visualization Assignments		20%
Article Discussion		5%
Reading Assessment		10%
Data Visualization Analysis		15%
Data Visualization Journal		15%
Poster Session		15%
Final Project		20%
	Total	100%

Special Conditions for the Bachelor of Arts in Visual and Performing Arts

- The junior-level student seeking admission to this program normally must have completed the required number of units of lower-division work in his/her selected option. Transfer students entering with fewer than the required number of units should complete the deficiencies within the first year of instruction at Cal State San Marcos.
- Credit/No Credit grading is not permitted in courses required for the major, with the exception of up to three (3) units of internship.
- All courses counted toward the major, including Preparation for the Major courses, must be completed with a grade of C (2.0) or better.
- At present, a number of lower-division courses are offered, but some community college courses might be needed to complete the lower-division requirements.
- All students enrolled in private or group music lessons are required to be enrolled concurrently in one of Cal State San Marcos' music ensembles.
- All VPA majors must complete a Capstone project in the final semester of residency (in consultation with an advisor).
- Courses in the arts which satisfy an upper-division general education requirement may not be used for the major.

BACHELOR OF ARTS IN VISUAL AND PERFORMING ARTS: ARTS & TECHNOLOGY OPTION

	Units
General Education	51
Preparation for the Major (by Option)	12-19
Upper-Division Option Requirements	39-45

Students must take a sufficient number of elective units to bring the total number of units to a minimum of 120

Arts and Technology Option
(57 units)

Arts and Technology Preparation for the Major
(18 units)

Critical/theoretical/cultural courses including: 9
- One survey of visual arts course (VPA 101, VSAR 120)
- One 20th/21st Century art history course (DNCE 101, VPA 101, VSAR 120)
- One history and criticism of photography, film or video course (VSAR 122) VSAR 251

Studio courses in visual arts, video or music: 9

DNCE 201	VSAR 110
VPA 181	VSAR 130
VSAR 102	VSAR 131

Upper-Division Arts & Technology
(39 units)

Visual and Performing Arts Interdisciplinary Core

VPA 302 3

Cross-Disciplinary Studio Work
Any upper-division studio course in theatre, dance, or performance (VSAR 310) 3

Arts and Technology Coursework
(33 units)

Arts and Technology Core

MUSC 210	3
VSAR 302	3
VSAR 303	3
VSAR 405	3

Critical/Theoretical/Cultural
(select one) 3

DNCE 322	VSAR 328
DNCE 324	VSAR 422
TA 323	VSAR 423
VSAR 327	VSAR 433

Studio Work in Arts & Technology (select three) 9

MUSC 304	VSAR 309	VSAR 318
MUSC 402	VSAR 310	VSAR 411
VSAR 304	VSAR 329	
VSAR 305	VSAR 404	
VSAR 306	VSAR 440	
VSAR 308		

Visual and Performing Arts Electives 6

Capstone Course 3

Student Learning Outcomes

Students completing a B.A. in VPA, Music Option will be able to:

1. Articulate and demonstrate proficiency in the language of music including scales, chords, harmony, rhythm, analysis, counterpoint, form, instrumentation, reading skills, ear-training, and music technology.
2. Apply knowledge of musical culture in a global context including Western concert music, American popular music, and music from other global traditions.
3. Create work in performance, music technology, improvisation and/or composition and present work in a public forum either through recitals, installations, or presentations of technology or composition work.
4. Demonstrate proficiency with primary instrument or voice, in solo performance and in small or large ensembles.