Sabbatical Report for Spring 2022

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Ventura College Geosciences

Project Title: Restructuring & Modernizing Ventura College'

on that a Certificate of Achievement in GIS should be under the CTE umbrella. I
mplementation of this at VC with Felecia DuenC -37.49 - (lul)-2 (d b,Chn1)2 rert wouk37.49 tcoftnBDC 0 -2 (0 Td 0 Tw 3.67
om within the Science Division, but with CTE aspect help from the CTE Division.

visioned building in Hybrid learning opportunities (and fully distanced learning options,
low, there is still significant benefit to on-campus GIS lab-base courses. The instructor
pring GIS courses, ended up having to start in remote mode, but then had students rejoin
ter in the semester. While not a well-planned class length hybrid, it did provide a sense
s and remote for the course. This term we are having that same instructor who no longer
wo spring courses remotely. At the end of the term we'll be evaluating the advantages
aving some/all of a GIS class remote. My current instinct it that some classes will work
ull) campus GIS Lab-based instruction, but others may work well in Hybrid mode. Some
l remote mode, but having students work side-by-side in the lab on the large monitors

Attendance in the Geodesign Summit continues a loose connection with Univ. of Southern California’s Spatial Science progo

Ventura GIS Program Revamp/Expansion Plan

Executive Summary:

Ventura College has offered Geographic Information Systems (GIS) courses since the first one was offered in fall 1998. Within a few years, 3 more GIS classes were added and were the core of a campus-based Proficiency

Initial Proposal: VC GIS version "2.0" (courses with units/suggest length/teaching mode/schedule)

Current (and continuing) Offerings:

GEOG/GIS V22 – Fundamentals of Mapping and GIS (C-ID code GEOG 150) – 3 units, 13-weeks

GEOG/GIS V26 – Introduction to GIS Software (C-ID code GEOG 155) – 2 units, 8-weeks

GIS V28A – GIS Project Development – 1.5 units, 8-weeks [List this as only CTE GIS, drop GEOG designation]

GIS V28B – GIS Advanced Project Development – 1.5 units, 8-weeks (Co-taught with G28A) [CTE GIS only]

Possible Future Offerings: (The ones with the G3Letter will likely be courses numbered GIS31, GIS32, etc.)

GIS V27 Intermediate GIS – Vector and Raster based analysis (2 units? 8-weeks?), Spatial & 3D Analyst

G3A Geospatial Data Analytics – Dashboards/ArcHub/Database development & integration, IoT data integration (2 units, 8 wks)

G3B Cartographic Design and Visualization – Cartographic/Visualization theory, methods, labeling/annotation, and map production. (2 units, 8 weeks)

G3C GIS Programming – Python/ArcPy/software & database integration? (2 unit class, 8- weeks? Pre-requisite ... programing class/or tutorial ... Python/C++/C#/Java/JavaScript/Rest API/MS SQL)

G3D GIS for Planning – ArcUrban, ArcIndoors, Geodesign Overview (2 units 8 weeks)

G3E Geospatial Imagery Integration – Remote Sensing details, image processing, and image integration into GIS, including point cloud, optical

Teaching Modes: All on-campus, Hybrid (on-campus 1 day/Zoom 1 day OR on-campus 1 day/Asynchronous), Online (all Asynchronous, all Zoom, mix). There is value for many of the classes to have an on-campus component utilizing our GIS Lab.

Course Schedule Options – Fall 1 (first 8 weeks), Fall 2 (second 8 weeks), Spring 1 (first 8 weeks), Spring 2 (second 8 weeks), Summer (4 week intensive, or 8 week), Weekend (Multiple Fri/Sat?)
[Exceptions to 4/8 week, GEOG/GIS V22 is 13 weeks in the Fall semester, Earth/Programming Background optional classes usually full semester.]

Sample schedule for Fall start (1-3 classes per semester):
Year 1 (9.5-16 units)
Fall 1 – GEOG/GIS V22 (3 units)
Fall full – Earth or Programming background class (3-4 units)
Spring 1 – G26 (2 units)
Spring 2 – G28A (1.5units)
– GIS Elective (G3A-E) (2 units) (optional) OR
Spring full – Mapping or Programming background class (optional) (3-4 units)
Summer – G3F (GIS in the Field) – Weekend class (optional) (1.5 units)

Year 2 (5.5-11.5units)
Fall 1 – G27 (2 units)
Fall 2 – Elective (G3A-E) (2 units) OR
Fall full – Earth or Programming background class (optional) (3-4 units)
Spring 1 – Elective (G3A-E) if necessary (2 units)
Spring 2 – G28B (1.5 units)
– GIS Elective (G3A-E) if necessary (2 units)
Spring full – Earth or Programming background class (optional) (3-4 units)
Summer – G3F (GIS in the Field) – Weekend class (optional) (1.5 units)

Sample schedule for Spring start (2-4 classes per semester):
Year 1 (5.5-11 units)
Spring 1 – G26 (2 units)
Spring 2 – G28A (1.5 unit)
– GIS Elective (G3A-E) (optional) (2 units) AND/OR
Spring full – Earth or Programming background class (optional) (3-4 units)
Summer – G3F (GIS in the Field) – Weekend class (optional) (1.5 units)

Year 2 (8.5-16.5 units)
Fall 1 – G22 and G27 (3 units, 2 units)
Fall 2 – Elective (G3A-E) (optional) (2 units) OR
Fall full – Earth or Programming background class (optional) (3-4 units)
Spring 1 Elective (G3A-E), if necessary (2 units)
Spring 2 – G28B (1.5 units)
– GIS Elective (G3A-E) (if necessary) (2 units) AND/OR
Spring full – Earth or Programming background class (if necessary) (3-4 units)
Summer – G3F (GIS in the Field) – Weekend class (optional) (1.5 units)

Note: We will determine scheduling for individual G3A-F courses in future (likely only one or two/semester)