GAVILAN BOARD OF TRUSTEES
CURRICULUM SUMMARY
APRIL 10, 2012

NEW COURSE PROPOSAL – SECOND READING

WTRM 110   Advanced Water/Wastewater/Distribution Math   3 Units, 3 Lec
This course is a continuation of the Beginning Water/Wastewater Mathematics course WTRM 102 and covers advanced math concepts used in the water/wastewater/distribution industry. Topics include industry standard formulas, conversion factors, MCRT, SVI, waste/return, horsepower, well drawdown, capacitence, yield, belt press cake/filtrate, SDI, sludge age, gas production and digestion rates.

WTRM 116   Advanced Wastewater Collections   3 Units, 3 Lec
This course provides an in-depth understanding of the components of wastewater collection systems and includes the design, operation, monitoring, maintenance and repair of lift pump stations as well as equipment maintenance, safety/survival systems, administration and organization principles.

WTRM 117   Water Use Efficiency Practitioner   3 Units, 3 Lec
This course focuses upon the efficient use and conservation of water in the following contexts: overall supply and demand; utility operations and measures; residential uses and measures; commercial, institutional uses and measures; and landscape uses and measures.

WTRM 118   Introduction to Occupational Health and Safety   3 Units, 3 Lec
This course covers the fundamentals of the health and safety associated with water treatment, distribution and waste water treatment operations. Subjects covered include introduction to safety, confined space, lockout-tag out, respiratory protection, heat stress, fall protection and traffic control. Each section will satisfy existing Cal/OSHA & other water industry related training requirements.

WTRM 119   Industrial Wastewater Management & Treatment   3 Units, 3 Lec
Industrial Wastewater Management & Treatment reviews various industries and their associated wastewater. The course introduces the characteristics of wastewater such as pH, total suspended solids, total dissolved solids, etc., and then reviews basic treatment methods that are used to remove the particular characteristic from the water. By the end of the course, students will be able to design a wastewater treatment plant by developing block flow diagrams which utilize basic treatment methods to achieve the desired wastewater quality.

WTRM 120   Pollution Prevention and Storm Water Management 3 Units, 3 Lec
Pollution Prevention and Storm Water Management reviews methods and regulations to prevent pollutants from reaching the waters of our rivers, streams and aquifers. It reviews methods of reducing pollutants in industrial wastewater, water reuse and water recycling. Additionally, it reviews the methods and regulations for storing hazardous wastes and materials. Lastly, it reviews the general stormwater permits for municipalities, industry and construction. At the end of this course, the student will have a fundamental knowledge of how to reduce pollution in our wastewater through effective water and process management, as well as appropriate hazardous materials and waste storage. This course also covers the implementation of methods required by the State's general permits to prevent pollution from entering stormwater runoff.

WTRM 121   Mechanical Maintenance   3 Units, 3 Lec
This course is designed to familiarize students with the basic principles of mechanical equipment design, installation, operation, maintenance, repair, overhaul and replacement. The course emphasizes understanding the value of preventative maintenance techniques such as equipment monitoring, lubrication analysis, machine alignment and scheduled overhaul.

MODIFICATIONS TO EXISTING COURSES – FORM C

ACCT/CSIS 120   Computerized Accounting – QuickBooks   3 Units, 3 Lec
Change hours and units:
FROM: 2 Units, 1 Lec, 3 Lab
TO: 3 Units, 3 Lec
Update textbook and content.

DM/ART/CSIS 113   Introduction to Digital Video   3 Units, 2 Lec, 3 Lab
Change description
      Introduction to the aesthetic and technical aspects of digital video recording, non-linear editing, visual effect generation, and production of video (and associated audio) using the personal computer equipped with specialized software such as Final Cut Pro, Motion, and After Effects. Also considered will be the preparation of digital video for distribution in interactive media such as CDs, DVDs, mobile devices, and the World Wide Web. Students will produce a final digital video project for distribution in various media formats. This course has the option of a letter grade or pass/no pass. May be repeated 2 times for credit. Also listed as ART 113
      ADVISORY: CSIS 1 or CSIS 2/2L or equivalent computer experience
Update content, student learning outcomes, methods of evaluation and textbook.

DM/CSIS 75   Photoshop I – Adobe Photoshop   3 Units, 3 Lec
Change hours:
FROM: 3 Units, 2 Lec, 3 Lab
TO: 3 Units, 3 Lec
Update content.

ENGR 2   Statics   3 Units, 3 Lec
Change description:
      Vector treatment of two- and three-dimensional force systems acting on particles and engineering structures in equilibrium. Topics include forces, moments, couples, resultants, equilibrium conditions, trusses, centroids, moment of inertia, beams, shear and moment diagrams, cables, fluids and friction.
Update textbook, student learning outcomes, content and methods of evaluation.

ENGR 4   Properties of Materials   3 Units, 3 Lec
Change description:
      Basic principles of physics and chemistry are used to determine the quantitative relationships that describe the behavior of solids. Particular emphasis is placed upon the relationship between the structure and properties of crystalline solids. Applications consider control of properties as an engineering design variable. A term paper based upon review of the periodical technical literature is required.
Update content, student performance objectives and textbook.

ENGR 5   **Engineering Programming and Problem Solving**   **3 Units, 2 Lec, 3 Lab**
Change title:
FROM: C++ Scientific Programming
TO: Engineering Programming and Problem Solving
Change description:
       An introduction to engineering problem solving using computer programming, numerical
       computing, and spreadsheets. Topics will include basic control structures, data types,
       input/output, an introduction to the design, implementation, testing and documentation of
       software, and the syntax and semantics of a modern programming language. Additional topics
       include matrix manipulation, curve plotting, finding solutions of ODEs, statistical analysis and
       presentation of data using available software.
Change prerequisite: Math 1A, with a grade of C or better. May be taken concurrently.
Update textbook, student learning outcomes, content and methods of evaluation.

DISTANCE EDUCATION – FORM D

ACCT/CSIS 120   **Computerized Accounting – QuickBooks**   **3 Units, 3 Lec**
Class offered as a hybrid. Online tutorials, reference materials, quizzes, and other resources leave more
class hours for interactive activities and projects.

ANTH 2   **Introduction to Archaeology**   **3 Units, 3 Lec**
Through the completion of weekly readings, writing assignments, video viewing, website consulting,
discussion forums, quizzes, and exams, students can successfully accomplish the course learning
outcomes in an online format.

ANTH 3   **Introduction to Cultural Anthropology**   **3 Units, 3 Lec**
Through the completion of weekly readings, writing assignments, video viewing, website consulting,
discussion forums, quizzes, and exams, students can successfully accomplish the course learning
outcomes in an online format.

ANTH 5   **Magic/Witchcraft and Religion**   **3 Units, 3 Lec**
Through the completion of weekly readings, writing assignments, video viewing, website consulting,
discussion forums, quizzes, and exams, students can successfully accomplish the course learning
outcomes in an online format.

ANTH 6   **Culture and Politics of Africa**   **3 Units, 3 Lec**
Through the completion of weekly readings, writing assignments, video viewing, website consulting,
discussion forums, quizzes, and exams, students can successfully accomplish the course learning
outcomes in an online format.

CGD 2   **2D/3D Technical Computer Graphics I**   **3 Units, 2 Lec, 3 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CGD 4   **2D/3D Technical Computer Graphics II**   **3 Units, 2 Lec, 3 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CGD 6   **Advanced Technical Computer Graphics**   **4 Units, 2 Lec, 6 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CGD 8   **Advanced Computer Graphics for Design Application I   3 Units, 2 Lec, 3 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CGD 9   **Advanced Computer Graphics for Design Application II   3 Units, 2 Lec, 3 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CGD 30   **Introduction to Environmental Design   3 Units, 2 Lec, 3 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CGD 110   **Computer Graphics Lab   1 – 4 Units, 3 – 12 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CGD 160   **Technical Desktop Publishing/Graphics   3 Units, 2 Lec, 3 Lab**
Offer course as Hybrid. It increases student access to instruction and supports student success.

CSIS/AJ 184   **Computer Forensics   3 Units, 2 Lec, 3 Lab**
Offer course as a Hybrid. Offering the lecture portion of this class online will provide an extra convenience for students. There are a large number of laboratory hours, which will continue to be on-campus, face-to-face. Moving the lectures online will increase the potential amounts of students, especially in a compacted summer semester.

CSIS 178   **Applied Networking   4 Units, 3 Lec, 3 Lab**
Class offered as a hybrid. Online tutorials, reference materials, quizzes, and other resources leave more class hours for hands-on projects.

CSIS 181   **PC Hardware   4 Units, 3 Lec, 3 Lab**
Class offered as a hybrid. Online tutorials, reference materials, quizzes, and other resources leave more class hours for hands-on projects.

CSIS 182   **Operating Systems   4 Units, 3 Lec, 3 Lab**
Class offered as a hybrid. Online tutorials, reference materials, quizzes, and other resources leave more class hours for hands-on projects.

DM/ CSIS 75   **Photoshop I – Adobe Photoshop   3 Units, 2 Lec, 3 Lab**
Class offered as a hybrid. Online tutorials, reference materials, quizzes, and other resources leave more class hours for interactive activities such as critiques and projects.

DM/ CSIS 76   **Digital Illustration   3 Units, 2 Lec, 3 Lab**
Class offered as a hybrid. Online tutorials, reference materials, quizzes, and other resources leave more class hours for interactive activities such as critiques and projects.

DM 74   **Advanced Photoshop   3 Units, 3 Lec**
Take advantage of the iLearn system for course management. To present material in an interactive format and to provide more flexibility for working students.

DM 77   **Introduction to Digital Media and its Tools   3 Units, 2 Lec, 3 Lab**
Take advantage of the iLearn system for course management. To present material in an interactive format and to provide more flexibility for working students.

DM/CSIS 108   **Digital Media Lab   .5 – 3 Units, 1.5 – 9 Lab**

Take advantage of the iLearn system for course management. To present material in an interactive format and to provide more flexibility for working students. This will provide a contact point for students who use the lab for project development.

[DM/CSIS 110](#) Interactive Animation: Flash　　　　　　　　**3 Units, 2 Lec, 3 Lab**
Take advantage of the iLearn system for course management. To present material in an interactive format and to provide more flexibility for working students. This will provide a contact point for students who use the lab for project development.

[DM/CSIS 113](#) Introduction to Digital Video　　　　　　　　**3 Units, 2 Lec, 3 Lab**
Take advantage of the iLearn system for course management. To present material in an interactive format and to provide more flexibility for working students..This will provide a contact point for students who use the lab for project development.

[DMV 117](#)　　Visual Effects-Motion Graphics　　　　　　　　**3 Units, 2 Lec, 3 Lab**
Take advantage of the iLearn system for course management. To present material in an interactive format and to provide more flexibility for working students..This will provide a contact point for students who use the lab for project development.