UNIVERSITY OF GUAM
COLLEGE OF NATURAL AND APPLIED SCIENCES
CLASS SYLLABUS, SPRING 2018

(Jan. 17 – May 11, 2018)

1. INSTRUCTOR / BASIC INFORMATION

Instructor: Dr. Y. Joseph Zou

Course: CS200-02 Computer Applications and Labs

Semester: Spring 2018

Meetings: 12:30 am – 13:50 pm, Mon. & Wed. at WB2 Computer Lab

Office: WB, Room #8

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Office Hours: 15:30 – 16:30pm, Monday and Wednesday
11:00 am - 12:30pm, Tuesday and Thursday online

2. CATALOG COURSE DESCRIPTION/PREREQUISITE

The course covers preparation, storage and processing of data, documents, and illustrations; Graphing, manipulating and simple analysis of data; Computer to computer communications and file transfers; Use of UOG network resources; and introduction to computer languages.

Prerequisite: Completion of MA085 Level II or consent of instructor.

3. COURSE DESCRIPTION

This course provides an overview of computer applications including a brief introduction to computer concepts, computer networks and its applications in telecommunications, Internet, World-Wide-Web, computer organization and hardware, computer operating systems and other system-software, application-software, multimedia software and their applications in Internet and cloud computing. Computer technology and their integration in teaching and learning, especially software applications in industry, in teaching and learning, such as Microsoft Office (Word, Excel, and PowerPoint and web technology will also be covered The basic computer skills are taught for IT industry, school students and teachers through different hands-on and lab training. The following are also included in this course: Microsoft Outlook configuration, web page writing, multimedia software production, and integration of the computer applications in education.

4. LEARNING OBJECTIVES

After completing this course students will be able to

- Differentiate the major components and the properties of a computer
- Describe how hardware and software make a computer work
- Know different kinds of computer CPU, RAM, ROM, Mass storage devices, Input/output devices, multimedia and digital imaging tools

- Differentiate system software, application software, multimedia software, and networking and web software
- Appreciate various applications of computer software in the 21st century
- Master basic computer hands-on silks needed in learning and teaching in education
- Use both GUI and Command-line operating systems (Windows, DOS, Unix/Linux and Mainframe)
- Be skillful in using Microsoft Word, Excel, Access, Power Point presentation, web-page development, client-server local area networks, Internet and WWW technology, and multimedia software development through hands-on lab practice.

5. FORMAT AND ACTIVITIES IN THE COURSE

This course will be taught through 50% of classroom lecture and 50% of hands-on lab practice of the semester. Lecture materials are in the textbook listed below (total 8 chapters). There are also 8 computer lab projects for this course as described in the course catalog and course objectives indicated above. Two exams, midterm and final are required.

6. TEXTBOOKS AND SUPPLIES

Teachers Discovering Computers: ***Integrating Technology and Digital Media in the Classroom****, 6th ed.* by G. B. Shelly, R. E. Gunter and G. A. Gunter, @Thomas Learning 2010

Introduction to Computers, 6th ed. by Peter Norton's @ McGraw Hill Technology Education 2006, ISBN 0-07-297890-2, or 7th edition (free e-book), 2009.

Microsoft Office 2013: Introductory **ISBN-10:** 1285166027 | **ISBN-13:** 9781285166025 by Misty E. Vermaat @Cengate Learning, 2014

Two 3.5-inch floppy disks, 2 CD or DVD disks.

7. COURSE POLICIES

A. GRADING

Course Grade	**Points**	**Approximate % of Grade**
Middle term examination	200	20
Final exam	250	25
Attendance and class performance	100	10
Laboratory and assignments	450	45
Extra credit	50	

Point System: 1000 total assigned points; 1050 total possible points with extra credit.

A >= 900
B >= 800
C >= 700
D >= 600
F <= 600

B. Attendance: The student is expected to attend all scheduled classes and is held responsible for all class work and assignments. Continued absences will result in an unsatisfactory grade report for the course. To be counted present, a student must be in the classroom during the scheduled class or lab time for at least 80% of schedule time.

C. Tests: All students are required to be present for a test. If something extreme happens and you can not make the test time, the student should immediately contact the instructor by phone or in person to receive permission before the test. Permission will be granted only under extenuating circumstances.

D. Makeup Tests: Makeup tests will be given only under extenuating circumstances (major illness, death in the family, etc.). Students desiring a Makeup Test must make arrangements with the instructor to take the test. A Makeup Test must be scheduled during office hours immediately after he/she returns school. If a student fails to take a Makeup Test within a week after the regular the scheduled test, that student will receive a ZERO for the test missed.

E. Assignments: All assignments will be due on the DUE DATE. Late submission will be received for final grade consideration but will not be graded.

F. Final Exam: NO MAKEUP WILL BE GIVEN FOR THE FINAL EXAM. A grade of ZERO will be given to any student not present for the final.

8. ADA Accommodation Services

If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact the Student Counseling and Advising Service Accommodations office to discuss your specific accommodation needs confidentially. As your instructor, I will receive notification of your approved accommodation(s) from the SCAS Accommodations Office. If you are not registered, you should do so immediately at the Student Center, Rotunda office #4, ph/(TTY): 735–2460, to coordinate your accommodation request.

9. Cheating Policy. Students are expected to uphold the school's standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work examinations, reports, and projects must be that of the student's own work.

The penalty for violating the honor code is severe. Any student violating the honor code is subject to receive a failing grade for the course and will be reported to the Office of Student Affairs. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

10. Submission Standard.

Make sure your name, student ID, and exercise number appear in the upper-left corner. If an exercise has multiple sheets, then staple them together. Do not staple different assignments together. Disorganized assignments (pages out of order, mislabeled, unreadable, etc.) will receive a grade of zero. If there are multiple sheets are to be handed in, then sequence them according to the order you were told to print them in the exercise.

11. Teamwork or Group work – Cooperative Learning

In the course project, students will be divided into several groups. Students will work as a group or team to help each other including assistance to those team members who are lagging behind classes or projects. A project's score is decided by two parts: 50% is from your group work (team performance) and another 50% is from individual effort.

12. No Tobacco /No Smoking Policy

University of Guam is a tobacco free campus. Smoking tobacco is not allowed in campus.

13. FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect

to their education records. These rights for students, parents and school officials can be viewed at: **http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html**

14. No Recording Policy

Recording of online class meetings is not allowed. Not only is the delivery of course content the intellectual property of the instructor, but students enrolled in the course have privacy rights. Unauthorized recording and distribution of online courses may violate federal law.

15. Course Tentative Schedule

Week	Lecture and Reading Assignments	Laboratory Reading and Hands-on Assignments	Test Points	Lab Points
1 2	1. Introduction to Windows Operating System, DOS and Microsoft Office 2013. 2. Intro. to computers and their applications	Lab 1: a) Use Mouse and GUI and create a free yahoo email account and use it. b) Use Internet and WWW to apply for Networking jobs on-line. Lab 2: Use Command-line User Interface to manage directories, files and Internet applications		40 40
3 4	Communications, Networks The Internet and the WWW	Lab 3: Microsoft Word Project 1 Research Paper Writing Lab 4: Microsoft Excel Project 1		40 40
5 6	Application Software, System Software and Productivity Tools	Lab 5; Microsoft Excel Project 2 Lab 6: Microsoft Excel Project 3, What-IF Programming		40 40
7	Midterm Review, Preparation of Exam	After Midterm: 1st-half semester SLO evaluation and assessment		
8	Spring Break			
9 10	Computer Hardware I Computer Hardware II	**Midterm Exam** Lab 7: MS Power Point Project: Movie-Making skills	200	 40
11	Multimedia Technology and Related Software	Lab 8: Integration I: Web page Design and Development using multiple skills		40
12 13	Integration of Technology and Curriculum into Classroom	Lab 9: Integration II: Web page design with Multimedia and Video		60
14 15	Computer Virus and Security Issues, Ethics, Health and Emerging Technologies	Lab 10. Movie and Webpage Presentations		70
16	**Final Review, Preparation and Exam**	2nd-half semester SLO evaluation and assessment	250	

16. Student Learning Outcomes at University, Program and General Education Levels

UOG Expected Student Learning Outcomes:

Some of the expected fundamental knowledge, skills, and values that the University of Guam student will have demonstrated upon completion of any degree are:

ILO1: Mastery of critical thinking & problem solving
ILO2: Mastery of quantitative analysis
ILO3: Effective oral and written communication
ILO4: Understanding & appreciation of culturally diverse people, ideas & values in a democratic context
ILO5: Responsible use of knowledge, natural resources, and technology
ILO6: An appreciation of the arts & sciences
ILO7: An interest in personal development & lifelong learning

GE QR Learning Outcomes:
UOG students will be able to apply analytical and quantitative reasoning (QR) to address complex challenges and everyday problems by:

1. Interpreting information presented in a mathematical and graphical form;
2. Representing information in a mathematical and graphical form;
3. Effectively calculating using quantitative data;
4. Analyzing quantitative information in order to scrutinize it and draw appropriate conclusions;
5. Evaluating the assumptions used in analyzing quantitative data
6. Communicating quantitative information in support or refutation of an argument.

Computer Science Program Learning Outcomes:

CS PLO-1: (GE) Demonstrate competence with Windows and basic MS Office applications especially MS WORD, EXCEL, and PowerPoint.

CS PLO-2: Demonstrate technical competence in Programming:
- Analyze problems and create algorithm/heuristic solutions.

CS PLO-3: Demonstrate technical competence in Programming:
- Develop these using computer-programming methodologies in several programming languages.

CS PLO-4: Demonstrate technical competence in Systems:
- Identify and analyze system requirements, criteria and specifications.

CS PLO-5: Demonstrate technical competence in Systems:
- Design and implement human sensitive/compatible computer based systems using appropriate tools, methods and techniques.

CS PLO-6: Demonstrate technical competence in Systems:
- Effectively manage, organize, and retrieve all forms of information.

CS PLO-7: Demonstrate technical competence in Systems:
- Evaluate system design solutions and their risks.

CS PLO-8: Demonstrate technical competence in Databases:
- Be able to design and implement a functional database.

CS PLO-9: Demonstrate technical competence in Networks:
- Be able to design, install, administer, and maintain a computer network.

CS PLO-10: Demonstrate technical competence in Networks:
- Be able to setup, install, and use two different operating systems and be able to program client-server applications for them.

CS PLO-11: Develop socially, professionally, and ethically utilize these technical skills to construct robust, secure, beneficial (commercial, educational, social) systems i.e. NO Spam, Phishing, Hacking, Deceptive, Fraudulent, Criminal, or Terroristic systems.

* Technical Competence means to be able to design, implement (build/code, test, debug), communicate effectively (in written, oral, and numerical forms), individually, and as part of a team.

18. CS200 Learning Outcomes / Learning Objectives:
(See the following table)

Course SLOs: After completion of CS200, students will be able to	**Program Learning Outcomes (PLOs)**	**University Learning Outcomes (ILOs)**	**GE QR Learning Outcomes**	**Method of Assessment**
• Differentiate the major components and the properties of a computer	**CS PLO-2** **CS PLO-4**	ILO-1 ILO-2	QR-1	Hands-on lab assignments, quizzes and tests.
• Describe how hardware and software make a computer work	**CS PLO-3** **CS PLO-5**	ILO-1 ILO-2 ILO-5	QR-2 QR-4	Computer hands-on Projects, Written exams
• Know different kinds of computer CPU, RAM, ROM, Mass storage devices, Input/output devices, multimedia and digital imaging tools	**CS PLO-6**	ILO-5 ILO-6	QR-2 QR-6	Computer hands-on Projects, Written exams, quizzes and tests.
• Differentiate system software, application software, multimedia software, and networking and web software	**CS PLO-5**	ILO-1 ILO-2 ILO-5 ILO-6	QR-2 QR-3 QR-4	Computer hands-on Projects, Written exams and hands-on exams
• Appreciate various applications of computer software in the 21st century	**CS PLO-5**	ILO-1 ILO-2 ILO-5 ILO-6	QR-1 QR-2 QR-3 QR-4 QR-5	Computer hands-on Projects, Written exams and hands-on exams
• Master basic computer hands-on silks needed in learning and teaching in education	**CS PLO-1** **CS PLO-7** **CS PLO-9** **CS PLO-10** **CS PLO-11**	ILO-1 ILO-2 ILO-5 ILO-6 ILO-7	QR-1 QR-2 QR-3 QR-4 QR-5	Computer hands-on Projects, Written exams and hands-on exams
• Use both GUI and Command-line operating systems (Windows, DOS, Unix/Linux and Mainframe)	**CS PLO-1** **CS PLO-7** **CS PLO-9** **CS PLO-10** **CS PLO-11**	ILO-1 ILO-2 ILO-5 ILO-6 ILO-7	QR-1 QR-2 QR-3 QR-4 QR-5	Computer hands-on Projects, Written exams and hands-on exams
• Be skillful in using Microsoft Word, Excel, Access, Power Point presentation, web-page development, client-server local area networks, Internet and WWW technology, and multimedia software development through hands-on lab practice.	**CS PLO-1** **CS PLO-7** **CS PLO-6** **CS PLO-8** **CS PLO-9** **CS PLO-10** **CS PLO-11**	ILO-1 ILO-2 ILO-3 ILO-4 ILO-5 ILO-6 ILO-7	QR-1 QR-2 QR-3 QR-4 QR-5 QR-6	Computer hands-on Projects, Presentations and demonstrations, Written exams and hands-on exams