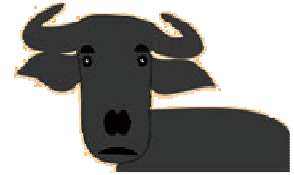




COURSE SYLLABUS



176 454/186453 Computer Application for Environmental Engineering

INSTRUCTOR: Netnapid Tantemsapya

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COURSE LENGTH: 15 weeks (45 hours)

COURSE DESCRIPTION: This class is a comprehensive course for environmental engineering practices with emphasis on computer skill. The course is designed for students who have good background in basic environmental engineering and computer. Classes are broken into 4 main topics, Ms-office, website development, environmental problem application and GIS(Geographic information system). Students may learn the following software applications:

- Office- Microsoft Office and OpenOffice
- Website- Nvu, dreamweaver
- Language- C++
- GIS-AutoCAD

Description: Computer Applications I is a study of technology focusing on the computer's effect on society, computer concepts, terminology, uses, and technology's affect on our changing society. Includes instruction on typical software applications such as word processing, spreadsheets, databases, presentation software, and Internet browsers and the affects these advances have made to our society.

Purpose and Goals:

- Students will analyze and understand the uses of computer in everyday life.
- Students will understand logical processes of computer problem solving.
- Students will use a personal computer and typical software.

Schedule

Time: Section 1 Monday 14:30-17:30 pm, Computer room
Section 2 Friday 14:00-17:00 pm, Computer room



Materials: Notebook, pen, computer compatible earphones.

LATE ASSIGNMENT POLICY: First day overdue on an assignment will result in a 10% markdown; second day will be a 20% markdown and so on. No assignments will be accepted after one week overdue.

EXAM POLICY: Students must attend all required scheduled exams that make up a final grade at the appointed time and place. Official letter is required in case of illness or personal crisis. Any student who misses a scheduled exam without approval will be given a grade of "0" for the exam.

PLAGIARISM POLICY: Plagiarism – using the oral or written words and ideas of others without proper acknowledgment – is an academic offense. Because plagiarism is a form of academic misconduct, students found guilty face serious consequences.

Lesson Plan

	topic	Program	activities	homework	Reading	Grading
1	Website (9 hours)	- Nvu - MS front Page - DreamWeaver	Introduction to Page Layout and Design, sitemap, web-interface, composition, design, construction and website structure. Creating website on http://www.kku.ac.th/hosting/	Creating website with -personal information -resume -homework database		Website-10 Oral Examination-10
2	Presenting your work (6 hours)	Open Office- Impress MS Powerpoint	Lecture on "Good presenting tips" and creating presentations, and learn utilizing program features to create professional quality graphics and slides.	Students will be assigned topics in Environmental Engineering to present in front of the class.	Read คคมพิจาณาและ เทคโนโลยีสารสนเทศชั้น พื้นฐาน (000160) module 6 Presentation, available in e- learning.kku.ac.th	Presentation-5
3	Database (6 hours)	Open Office- base MS-access	Introduction database concepts, using query, tables, reports Web integration, linking and embedding.	Working with address database	Read คคมพิจาณาและ เทคโนโลยีสารสนเทศชั้น พื้นฐาน (000160) module 7 Database, available in e-learning.kku.ac.th	Pre test-5 Database-5 Oral exam-10
4	River Mechanic (12 hours)	Open Office-cal MS-Excel Open Office- Draw	Intro to river mechanic. Calculate DO change in river using spreadsheet and computer language.	- Use spreadsheet to determine DO change, calculate, show graph. - Use drawing to	Read คคมพิจาณาและ เทคโนโลยีสารสนเทศชั้น พื้นฐาน (000160) Module 5 : Spreadsheets,	Pre test-5 Spread Sheet-10 Oral exam-15



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	topic	Program	activities	homework	Reading	Grading
		MS-Visio C++		make program flowchart - Writing program with C++	available in e- learning.kku.ac.th	
5	GIS (12 hours)	- AutoCAD - ArcView 3.2	Intro to GIS, remote sensing, mapping, google earth. Develop KKU GIS.	- Use AutoCAD to draw KKU Map - Create GIS database. - Import database to the web	Read about GIS, available in http://www.gisthai.org/index.html	Pre test-5 AutoCAD-5 GIS-5 Oral exam-10