Course Syllabus

1. Program of Study	Bachelor of Science Program
Faculty	Mahidol University International College
2. Course Code	ICSC 304
Course Title	Computer for Research
3. Number of Credits	4 (4-0-8) (Lecture/Lab/Self -study)
4. Prerequisite *(s)*	ICNS 141
5. Type of Course	Science core course
6. Semester/ Academic Year	1st and 3rd trimester/ 2004
7. Course condition	**-**

8. Course Description

Basic knowledge of various platforms of operating systems (DOS, UNIX, WINDOWS), files and data management, basic programming, application packages for statistical analysis and scientific plots, literature search through the on-line library computer system.

9. Course Objective *(s)*

After successful completion of this course, students should be able to

1. Identify the historical, legal, and ethical issues with respect to computing.
2. Describe the basic structure architecture, and workings of a personal computer.
3. Use terminology related to computers and technology appropriately in written and oral communication.
4. Understand the applications of, and how to navigate through, Microsoft Windows.
5. Download and run from the network drive simple software programs.
6. Produce documents with practical application to a college student using, word processing, spreadsheet, database, and statistical programs.
7. Produce web site using software available in the computer lab.
8. Send and receive email and find and retrieve information on the World Wide Web.
9. Develop a computer-based multimedia presentation.
10. Perform a computer-based literature search on each student major topic via the electronic library.
11. Develop a World Wide Web homepage in Microsoft Front Page or Publisher and then publish I ton Windows NT or CSUN' UNIX server.
12. Describe and use commercial computer software to analyze and calculated statistics typically used in the field of sciences.

10. Course Outline

Week	Topics	Hours			Instructor
		Lecture	**Lab**	**Self-study**	
1	Introduction to hardware and software, Ehtics	4	0	8	Prayad Pokethitiyook
2	Library Search, WWW Library Resources via Internet, Microsoft Front Page	4	0	8	Prayad Pokethitiyook
3	Microsoft Word Microsoft Excel	4	0	8	Prayad Pokethitiyook
4	Microsoft Access	4	0	8	Prayad Pokethitiyook
5	Mid-term Exam	4	0	8	Prayad Pokethitiyook
6	Statistical Analysis Package (SPSS) I	4	0	8	Prayad Pokethitiyook
7	Statistical Analysis Package (SPSS) II	4	0	8	Prayad Pokethitiyook
8	Microsoft Power Point and Macromedia Flash	4	0	8	Prayad Pokethitiyook
9	Web Page design and practice	4	0	8	Prayad Pokethitiyook
10	Class Presentation	4	0	8	Prayad Pokethitiyook
11	Class Presentation	4	0	8	Prayad Pokethitiyook
	Total	44	0	88	
Final examination					

11. Teaching Method *(s)*

Method of teaching consists of lecturing, assignments, field trip, and presentation.

12. Teaching Media

Textbooks, Handouts and LCD projectors.

13. Measurement and evaluation of student achievement

Student achievement is measured and evaluated by

13.1 the ability to identify the historical, legal, and ethical issues with respect to computing.

13.2 the ability to describe the basic structure architecture, and workings of a personal computer.

13.3 the ability to use terminology related to computers and technology appropriately in written and oral communication.

13.4 the ability to understand the applications of, and how to navigate through, Microsoft Windows.

13.5 the ability to download and run from the network drive simple software programs.

13.6 the ability to produce documents with practical application to a college student using, word processing, spreadsheet, database, and statistical programs.

13.7 the ability to produce web site using software available in the computer lab.

13.8 the ability to send and receive email and find and retrieve information on the World Wide Web.

13.9 the ability to develop a computer-based multimedia presentation.

13.10 the ability to perform a computer-based literature search on each student major topic via the electronic library.

13.11 the ability to develop a World Wide Web homepage in Microsoft Front Page or Publisher and then publish I ton Windows NT or CSUN' UNIX server.

13.12 the ability to describe and use commercial computer software to analyze and calculated statistics typically used in the field of sciences.

Students will be evaluated from their total score (out of 100%). Grading system is A, B^+, B, C^+, C, D+, D, and F.

1. Mid-term examination	35%	
2. Multimedia and presentation	25%	
3. Class assignments	20%	
4. Web page and attendance	20%	
Total	100%	

14. Course evaluation

14.1 Students' achievement as indicated in number 13 above.

14.2 Students' satisfaction towards teaching and learning of the course using questionnaires.

15. Reference *(s)*

Instructor Handout.

Tabachnick, B. and Fidell, L. Computer-assisted research design and analysis. USA. Pearson Education. 2000.

16. Instructor *(s)*

Associate Professor Dr. Prayad Pokethitiyook

17. Course Coordinator

Associate Professor Dr. Prayad Pokethitiyook