

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Hardware and Operating Systems

CODE NO. : MMW106 **SEMESTER:** 1

PROGRAM: MULTI MEDIA AND WEB DESIGN

AUTHOR: Cindy Trainor

DATE: June 2000 **PREVIOUS OUTLINE DATED:**

APPROVED:

DEAN

DATE

TOTAL CREDITS: 5

PREREQUISITE(S): Diploma in Computer Studies Field or Graphic Design

HOURS/WEEK: 5 Hours/Week

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For additional information, please contact
School of
(705) 759-2554, Ext.

I. COURSE DESCRIPTION:

A wide variety of computer hardware and operating systems are being used to create multi-media productions. In today's competitive world it is advantageous to be knowledgeable on various platforms.

This course will introduce the student to multimedia hardware equipment in both PC and MAC environments, including microphones, digital cameras, FireWire camcorders, scanners, printers, and CD/DVD reader/writers. This course will also introduce the student to peripheral interfaces including sound cards, video cards, IDE, SCSI, and FireWire. The student will also be exposed to different operating systems including Windows98, NT, and Unix. The student will also practice converting files in different machine-dependent formats, including archiving and backups.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Install and configure multimedia equipment on PCs and Macs.

Potential Elements of the Performance:

- Discuss computer buses, microprocessors, PC/Mac architecture.
- Discuss sound cards and analog to digital conversion.
- Discuss video cards and modify their settings.
- Install microphones and speakers. Control the input/output using mixer software.
- Discuss and utilize Web cameras, digital cameras, scanners, camcorders, and printers on both PC and Mac computers.
- Discuss various interfaces used to install peripherals.
- Install peripherals using different interfaces.

2. Install and configure multi-media software in various operating system environments.

Potential Elements of the Performance:

- Discuss software installation issues and safe practices.
- Install and configure multi-media software in a Windows95/98 environment.
- Install and configure multi-media software in a Mac environment.

3. Server operating systems including Windows NT and UNIX.

Potential Elements of the Performance:

- Overview and comparison of Windows NT and UNIX.
- Develop a proficiency in file management in both systems.
- Understand and utilize TELNET and FTP.
- Install and administer a Web Server.

4. Different file formats and transferring files between different systems, archiving and backups.

Potential Elements of the Performance:

- Discuss and compare various storage devices.
- Install and test a ZIP drive on PCs and Macs.
- Discuss different file systems used on PCs and Macs.
- Convert PC files so that they are readable on Macs and visa-versa.
- Discuss file compression and software used for compression.
- Discuss and practice archiving and backups.
- Develop a backup plan.

5. Burn CDs on PCs and Macs that are readable in both PC and Mac environments.

Potential Elements of the Performance:

- Discuss the process of burning CDs and DVDs.
- Discuss and compare the different interfaces used for installing a CD/DVD drive to a system.
- Install a CD drive on a PC and Mac using different interfaces.
- Create CDs for use on multiple platforms using both PCs (Adaptec CD software) and Macs (Toast software).

III. TOPICS:

1. **Multimedia peripherals and interfaces.**
2. **Software installation.**
3. **File systems and transferring files between PC and Macs.**
4. **Archiving and backing up files.**
5. **Create CDs on PCs and Macs that are readable in both PC and Mac environments.**

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Blanks CDs and floppy diskettes.

V. EVALUATION PROCESS/GRADING SYSTEM:

- | | |
|-------------------------|-----|
| 1. Tests (3) | 40% |
| 2. Quizzes (2) | 20% |
| 3. Labs and Assignments | 40% |

The following semester grades will be assigned to students in postsecondary courses:

| <u>Grade</u> | <u>Definition</u> | <u>Grade Point Equivalent</u> |
|--------------|---|-------------------------------|
| A+ | 90 - 100% | 4.00 |
| A | 80 - 89% | 3.75 |
| B | 70 - 79% | 3.00 |
| C | 60 - 69% | 2.00 |
| R (Repeat) | 59% or below | 0.00 |
| CR (Credit) | Credit for diploma requirements has been awarded. | |

| | |
|----|---|
| S | Satisfactory achievement in field placement or non-graded subject areas. |
| U | Unsatisfactory achievement in field placement or non-graded subject areas. |
| X | A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual – Deferred Grades and Make-up</i>). |
| NR | Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades. |

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

<include any other special notes appropriate to your course>

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.