

BOROUGH OF MANHATTAN COMMUNITY COLLEGE

City University of New York

Department of Computer Information Systems

Office S150/Phone: 212-220-1476

Title of Course: Computer Operations II / JCL

CIS 335

Fall 2007

Credits: 4

Class hours: 3

Lab hours: 2

Course Description:

This course will introduce the student to mainframe computer operations through the use of OS/MVS Job Control Language (JCL). It will teach students to perform tasks related to the creation and maintenance of datasets using common file access methods and their concomitant utilities in IBM 30XX environments. They will also be instructed on the background, purpose and the concepts of operating systems as implemented in OS/MVS.

Prerequisites/Co-requisites: CIS 235 or any CIS 300-level course or departmental approval

Student Learning Outcomes:

After completing this course, students will be able to:

- Identify the major sub-systems of OS/MVS
- Manage data-set creation, deletion and modification by means of Job Control Language
- Use MVS utility programs to create, access and modify sequential, partitioned and VSAM data sets
- Maintain catalogs & directories under MVS

Required Text & Readings:

Textbook: **Murach's OS/390 and z/OS JCL, 2nd Edition**

Author: **Doug Lowe and Raul Menendez**

Publisher: **Murach Publishing**

ISBN: **1-890774-14-6**

Other Resources: Two floppy diskettes (Double sided double density); Flash drives are recommended. The instructor will provide each student with a VM user id and a Wylbur account.

Use of Technology (if applicable):

Evaluation & Requirements of Students:

Midterm Exam:	20 %
Final Exam:	25 %
Projects:	20 %
Quizzes:	25 %
Lab/Homework:	<u>10 %</u>
	100%

Outline of Topics:

1. Bases and base conversions; Collating Sequences
2. Internal Representation.
3. Hardware Organization: CPU, Registers, Main memory; Microprocessors.
4. Machine Cycle; Program and Data Files; Access Methods.
5. Input / Output devices; Basic Communications Concepts.
6. Tapes; Disks
7. Unit Record Devices: Printers, Card Readers.
8. Higher level languages; Interpreted vs. compiled; compilation; link editing; execution.
9. Multiprogramming; multiprocessing; timesharing; interactive and batch processing.
10. Introduction to VM/SP: CP, CMS, RSCS, PVM; Virtual Machine; Virtual Storage.
11. CP Spooling facility and virtual devices.
12. Communicating with other virtual machines; XEDIT; Load Modules: RSCS.
13. Introduction to UNIX; UNIX structure.
14. The File System
15. The Shell
16. Text Processing: Editors, Mail Facility.

College Attendance Policy:

At BMCC, the maximum number of absences is limited to one more hour than the number of hours a class meets in one week. For example, you may be enrolled in a three-hour class. In that class, you would be allowed 4 hours of absence (not 4 days). In the case of excessive absences, the instructor has the option to lower the grade or assign an F or WU grade.

Academic Adjustments for Students with Disabilities:

Students with disabilities who require reasonable accommodations or academic adjustments for this course must contact the Office of Services for Students with Disabilities. BMCC is committed to providing equal access to all programs and curricula to all students.

BMCC Policy on Plagiarism and Academic Integrity Statement:

Plagiarism is the presentation of someone else's ideas, words or artistic, scientific, or technical work as one's own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC's web side, www.bmcc.cuny.edu. For further information on integrity and behavior, please consult the college bulletin (also available online).