KENYATTA UNIVERSITY

SCHOOL OF ENGINEERING AND TECHNOLOGY

**COURSE OUTLINE**

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|  | KENYATTA UNIVERSITY  QUALITY MANAGEMENT SYSTEM | Ref: | KU/ACAD/SOP/8.5-3 |
| Ver: | 1.0 |
| Title | UNIT TITLE: MULTIMEDIA SYSTESM ASSURANCE  UNIT CODE: SIT 210  Credit hours:3  Course units:3  Lecture hours: 36hours | Date: |  |

COURSE INSTRUCTOR: ABRAHAM MATHEKA

**Purpose of the course**: To introduce students to multimedia systems

**Expected Learning Outcomes:**

* Define multimedia systems
* Explain characteristics of a multimedia systems
* Understand the issues in multimedia computing,
* Describe the multimedia applications
* Understand the driving forces in multimedia

**Course content**

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| WEEK ONE | | Multimedia Concept & Topics |
| WEEK TWO | | Multimedia Classification |
| WEEK THREE | | Audio Fundamentals |
| WEEK FOUR | | Quantization and PCM Coding |
| WEEK FIVE | | Audio Coding and Standards |
| WEEK SIX | | CAT ONE |
| WEEK SEVEN | | Image and Video Fundamentals |
| WEEK EIGHT | | JPEG and H.26x Standards |
| WEEK NINE | MPEG Standards | |
| WEEK TEN | Review of Advanced Coding, Mobile Multimedia Service  Over Wireless Networks | |
| WEEK ELEVEN | Media Object Production  - Hardware and Software Tools | |
| WEEK TWELVE | CAT TWO | |
| WEEK THIRTEEN | Media Integration & Presentation  - Languages and Tools | |
| WEEK FOURTEEN | Media Protection, Media Retrieval | |
| WEEK FIFTEEN | Media Distribution Across Internet ,Media Communications  Internet Telephony and Teleconference | |
| WEEK SIXTEEN | EXAMINATIONS | |

**MODE OF DELIVERY**

Lectures, discovery leaning, problem based learning, experimental learning, group based learning, independent studies, and e-learning, demonstrations, self –study, guided research ,examples.

**ASSESSMENT**

Course work (CATs, Assignments, Practical Projects, Presentations) - 30%

End of semester exam - 70%

**INSTRUCTIONAL MATERIALS**

Computers, projector, whiteboard, whiteboard mark pens, lecture notes, internet

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| **CORE READING MATERIALS FOR THE COURSE**   1. Burg, J. (2009). The science of digital media. Prentice Hall, Upper Saddle River: NJ. - Chapters 1, 2, 4 and 6. 2. 2 Ze-Nian, L. & Drew, M.S. (2004). Fundamentals of Multimedia. Prentice Hall, Upper Saddle River, NJ. - Parts I and II   **RECOMMENDED REFERENCE MATERIALS :**   1. Bamberger, R., & Brylawski. S. (2010) The state of recorded sound preservation in the United States: a national legacy at risk in the digital age. Washington, D.C.: Council on Library and Information Resources. 2. Mallon, A. (1995). Storyboarding multimedia. Retrieved from http://adrianmallonmultimedia.com/designguidelines/story.htm 3. Rosenblum, A.L., Burr, G., & Guastavino, C. (2013). Survey: Adoption of published standards in cylinder and 78rpm disc digitization. IASA Journal, 41, 40-55. 4. Weisler, (1993). The world is not a desktop. Retrieved from: http://www.ubiq.com/hypertext/weiser/ACMInteractions2.html   LECTURER CONTACTS |

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