

## 99-1 Preliminary Syllabus, Da-Yeh Univ

| Information       |               |                       |                |
|-------------------|---------------|-----------------------|----------------|
| Title             | 影像處理          | Serial No. / ID       | 1204 / NGR3038 |
| Dept.             | 工業工程與科技管理學系碩士 | School System / Class | 研究所碩士班1年1班     |
| Lecturer          | 蘇慶良           | Full or Part-time     | 專任             |
| Required / Credit | Optinal / 3   | Graduate Class        | No             |
| Time / Place      | (二)234 / H727 | Language              | English        |

| Introduction  |
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| The topics of the follows are discussed in this course: Fourier transform, image file reading, Sobel operator, Searching and thinning edge operator. Finally the result of the Fourier transform is used to classify different objects. |

| Outline  |
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| <ol style="list-style-type: none"> <li>1. Read the Image File</li> <li>2. Image Histogram</li> <li>3. Threshold the Image</li> <li>4. (小考) The 3*3 Cross Medium Filter</li> <li>5. The Sobel Operator</li> <li>6. The Searching and Thinning Edge Operator</li> <li>7. (Borland C++ Builder ADO Object and Database)</li> <li>8. (Borland C++ Builder ADO Object and Database)</li> <li>9. Midterm test</li> <li>10. Fourier Transform</li> <li>11. Fourier Transform</li> <li>12. (quiz) Image Filter, Wavelet Transform</li> <li>13. Color Image processing (Show Subtract Result)</li> <li>14. Fingerprint Image Thinning</li> <li>15. Control Points Finding of Fingerprint Image</li> <li>16. Object Classification(Borland C++ Builder ADO Object and Database)</li> <li>17. Object Classification(Borland C++ Builder ADO Object and Database)</li> <li>18. Final test</li> </ol> |

| Prerequisite |
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