## 97-1 Preliminary Syllabus, Da-Yeh Univ

| Information       |               |                       |                |
|-------------------|---------------|-----------------------|----------------|
| Title             | 神經網路          | Serial No. / ID       | 1128 / EGR5020 |
| Dept.             | 電機工程學系碩士班     | School System / Class | 研究所碩士班1年1班     |
| Lecturer          | 陳木松           | Full or Part-time     | 專任             |
| Required / Credit | Optinal / 3   | Graduate Class        | NO             |
| Time / Place      | (—)ABC / H371 | Language              | English        |

## Introduction

Learn the concept of machine learning and its application in pattern recognition

## Outline

- 1.Basic concept introduction
- 2.What is learning?
- 3. The perceptron
- 4. Derivative-base optimization
- 5. Least-mean-square algorithm 6. Advanced learning algorithm 7. Multilayer perceptron neural networks
- 8. Supervised Learning algorithm 9. Backpropagation learning
- 10. Radial basis function network
- 11.Unsupervised Learning
- 12.Self-organizing system ?
- 13. Hebbian learning
- 14.Self-organizing system
- 15.Competitive learning

## Prerequisite

Calculus, Linear algebra, Programming language