



COMMON COURSE OUTLINE: Course discipline/number/title: COMP 1150: Introduction to Computer Science

A. CATALOG DESCRIPTION

1. **Credits: 3**
2. **Hours/Week: 3 plus hands on application time scheduled as needed**
3. **Prerequisites (Course discipline/number):** MATH 0099, or appropriate RCTC placement score into MATH 1115; college level reading.
4. **Co-requisites (Course discipline/number):** None
5. **MnTC Goals (if any):** NA

This course Introduction to the field of computer science, including concepts of machine architecture, data representation, operating systems, networking and telecommunications, algorithms, programming languages, software engineering, data organization, and artificial intelligence. Intended as a first course for computer science majors.

B. DATE LAST REVISED (Month, year): March, 1997

C. OUTLINE OF MAJOR CONTENT AREAS:

1. Data Storage
2. Data manipulation
3. Operating systems
4. Networking and telecommunications
5. Algorithms
6. Programming languages
7. Software Engineering
8. Data Structures
9. File Structures
10. Introduction to Clinical Neurophysiology and EEG
11. Introduction to Autonomic Testing
12. Introduction to Evoked Potentials
13. Introduction to Electromyography
14. Introduction to Polysomnography
15. Introduction to EEG electrode Placement
16. Basic EEG frequencies
17. EEG Descriptors
18. EEG Record Review
19. Normal Adult EEG Patterns
20. Activation Procedures
21. Artifacts
22. Practice EEG Electrode Placement

D. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Relate the basic concepts of each neurophysiology procedure discussed.
2. Demonstrate the 10-20 System of Electrode Placement within a 15 minute time limit.
3. Relate the 10-20 System nomenclature and the underlying anatomical areas.
4. Identify the four basic EEG frequency bands.
5. Name and describe four EEG activation procedures.
6. Differentiate between a physiological and nonphysiological artifact.
7. Understand medical terms by identifying the component parts and defining the meaning of these parts.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:

Students are expected to attend all class sessions

G. SPECIAL INFORMATION (if any): None