NORMANDALE COMMUNITY COLLEGE
COMMON COURSE OUTLINE

I.   Effective Date of outline
Spring Semester, 2017. To be reviewed by department annually.

II.   Catalog Description
COMT 1184 Telecommunications
3 credits
Offered: Fall
Prerequisites: COMT 1107
Course description: Aspects of telecommunications such as network topology, standards, OSI model, media, modems, data compression, data security, and the Internet.

III.   Recommended Entry Skills/Knowledge
Reading level 3, English level 2, Math level 1

IV.   Major Content Areas (Topics)
Standards and models. Conductive media. Text codes. Analog and digital waveforms. Modulation and demodulation. Modems. Serial and parallel transmission. Interface standards. Multiplexing. Data compression. Parity and cyclic redundancy checks. Hamming codes. Encryption/decryption. Protocols. Ethernet and Token Ring.

V.   Learning Outcomes
Upon successful completion of the course, the student should be able to:
a.   describe the Ethernet and Token Ring network topologies
b.   distinguish between RSA and DES encryption methods
c.   explain multiplexing and demultiplexing
d.   understand the operation of modems
e.   define modulation and demodulation
f.   distinguish between analog and digital waveforms
g.   describe parameters of standard physical media
h.   understand differences between serial and parallel transmission modes

VI.   Methods Used for Evaluation of Student Learning
Participation in online learning activities, online labs, weekly quizzes, mid-term exams, and final exam

VII.   Special Information
None