Tennessee Technological University
Mathematics Department

SYLLABUS FOR

MATH : ____1020____   Course Title: ____First-Year Connections____

I.   COURSE DESCRIPTION FROM CATALOG:

This course is intended as a bridge course for students entering TTU from high school. The course is designed to strengthen the student's connection to TTU, the College of Arts and Sciences, and the appropriate department (CSC, MATH, or PHYS) by focusing on the enhancement of skills needed for academic success. This course engages the student in meaningful academic and non-academic out-of-the-classroom activities, as learning occurs both in and out of the classroom. It emphasizes critical thinking, the formation of academic and social goals and support groups, and time-management and study skills. Recitation 2. Credit 1.

II.   PREREQUISITE(S): None

III.   COURSE OBJECTIVE(S):

- To connect students with other students – encouraging both academic and social peer networks.
- To connect students with the University and the Department – the curriculum and campus support services.
- To connect students' present college experience with their future plans and ambitions.
- To help new students think more creatively and critically.
- To help new students improve academic functioning through effective management of time.
- Build academic and social support groups – through a knowledge of academic, student affairs, and departmental resources, and through a development of interpersonal skills between students and faculty.
- Introduce efficient and productive study skills such as technical reading, note-taking, and test-taking strategies, and managing academic anxiety.

IV.   TOPICS TO BE COVERED:

Critical thinking/problem solving, Study skills – reading, note making, test taking, Career exploration, Communication skills, Time management, Campus resources

- Summaries (5) of campus lectures, workshops, cultural events, or TTU clubs or organizations – submitted within 5 working days of attendance.
- Attending career fair.
- Assignments –in & out-of-class reading/writing activities; online eNotes; library research.
- Academic record of all semester courses, with grades and action plans
- Curricular plan for major field of study and/or career search

V.   MAJOR TEACHING METHOD(S):   Lecture and other as appropriate.

VI.   ADDITIONAL INFORMATION:

Cross Listed with **CSC 1020** and **Physics 1020**.

At its meeting on October 12 the Academic Council approved the following changes in UNIV 1020 and equivalent courses:

1. Students may not drop UNIV 1020 or other courses serving the function of UNIV 1020. However, exceptions may be made for extenuating circumstances.
2. All students in UNIV 1020 or equivalent courses must attend at least two events one Fine Arts and one World Cultures such as those presented by Center Stage.

Attendance: Students are expected to attend all class meetings. If a student is absent he/she must contact the professor within one week of the absence.

Grading: Letter grades are earned based upon attendance and course assignments.

VIII.   POSSIBLE TEXTS AND REFERENCES:

General:
William Briggs, *Ants, Bikes, & Clocks, Problem Solving for Undergraduates*, SIAM, 2005, ISBN 0898715741

CSC specific:
Paul Freiberger, Michael Swaine, *Fire in the Valley: The Making of The Personal Computer*, McGraw-Hill (1999), ISBN: 0071358927
Katie Hafner, *Where Wizards Stay Up Late: The Origins Of The Internet*, Simon & Schuster (1998), ISBN: 0684832674
Tim Berners-Lee, *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web*, Collins (2000), ISBN: 006251587X

Math specific:
Stephen Hawking, *God Created The Integers*, Running Press (2005), ISBN: 0762419229
Calvin C. Clawson, *The Mathematical Traveler*, Basic Books (2003), ISBN: 0738208353
Calvin C. Clawson, *Mathematical Sorcery*, Basic Books (2001), ISBN: 073820496X
Keith Devlin, *The Math Gene*, Basic Books (2001), ISBN: 0465016197
George Phillips, *Mathematics Is Not a Spectator Sport*, Springer (2005), ISBN 0387255281

Physics specific:
Stephen Hawking, *A Brief History of Time*, Bantam, ISBN 0553380168
Edward Speyer, *Six Roads from Newton*, John Wiley & Sons, ISBN 0471305030
James Burke, *The Day the Universe Changed*, Back Bay Books, ISBN 0316117048
Thomas Kuhn, *The Structure of Scientific Revolutions*, University of Chicago Press, ISBN 0226458083

VIII. ANY TECHNOLOGY THAT MAY BE USED:

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). An Accommodation Request (AR) should be completed as soon as possible, preferably by the end of the first week of the course. The ODS is located in the Roaden University Center, Room 112; phone 372-6119.