2010-11

CHECKLIST FOR GRADUATION REQUIREMENTS IN COMPUTER SCIENCE - BACHELOR OF SCIENCE

Minimum of 132 s.h. required for graduation *(36 s.h. must be 300/400-level courses)*
(Additional hours to total 132 s.h. -- includes second major, minor, and elective hours.)

Name________________________________________ I.D. # ____________________________ H.S. deficiencies: Math ____ Foreign Language ____

**General Studies Requirements**
(General Studies must total at least 58 s.h.)

**FIRST-YEAR CORE:**

GST 110 - Global Experience (4 s.h.)________________

ENG 110 - College Writing (4 s.h.)________________

(C- or better required for graduation)

MTH 112 or 121 or 212 (4 s.h.)________

HED 111 - Contemp. Wellness Issues (2 s.h.)________________

**Experiential Learning Requirement (ELR):** (One Unit)
May be met by any one of the following: internship, practicum, co-op, study abroad, student teaching, approved field-based course or documented service, leadership, or individualized learning experience.

**Foreign Language Requirement:**
May be met by one of the following: scoring 4 or 5 on a language Advanced Placement test, or scoring similarly on the IB Higher Level exam; placing beyond FL 122 on the CAPE placement test; completing a 122-level language course; or completing a semester or summer in a university approved program in a non-English speaking country that includes a course in language instruction at the 122 level or above. Only 4 s.h. of language study utilized to meet the graduation requirement apply to Civilization category. Students are expected to complete this requirement by the end of their sophomore year.

**STUDIES IN THE ARTS AND SCIENCES:**
[Transfer students with at least 18 s.h. of transfer credit must complete 32 hours total in Studies in the Arts & Sciences, but may have as few as 7 hours in one or more of the four Studies in the Arts & Sciences areas.]

**Expression** (8 s.h.)________
[Eight hours chosen from at least two of the following: literature (in English or foreign languages), philosophy, & fine arts (art, art history, dance, fine arts, music, music theatre, & theatre). At least one course must be literature.]

**Civilization** (8 s.h.)________
[Eight hours chosen from at least two of the following: history, foreign languages, and religious studies.]

**Society** (8 s.h.)________
[Eight hours chosen from at least two of the following: economics, geography, human services - HSS 111 only, political science, psychology, & sociology/anthropology.]

**Science** *(Lab: ___) **CSC 130* (8 s.h.)________
Eight hours chosen from one or more of the following: mathematics, science, and computer science *(CSC designation)*. At least one course must be a physical or biological laboratory science.

**ADVANCED STUDIES** *(Must be outside major.)*

(8 s.h.)________
[Eight hours of 300-400 level coursework outside the major field and chosen from areas under Studies in the Arts and Sciences.]

**GST Interdisciplinary Seminar** (4 s.h.)________
[300-400 level GST course; requires junior/senior status.]

*Required in major; may count in General Studies.

**Major Requirements**

A minimum of 64 s.h. in the following courses is required.

_____ *CSC 130 (4) – Computer Science I

_____ *CSC 230 (4) – Computer Science II

_____ *CSC 330 (4) – Computer Science III

_____ *CSC 331 (4) – Algorithm Analysis

_____ *CSC 335 (4) – Programming Languages

_____ *CSC 342 (4) – Computer Systems

_____ *CSC 442 (4) – Mobile Computing

_____ *CSC 462 (4) – Software Development/Capstone

_____ MTH 206 (4) – Discrete Structures

Choose one course (4 s.h.) from the following:

MTH 221 (4) – Calculus II

MTH 306 (4) – Applied Matrix Theory

Choose one course (4 s.h.) beyond core math requirement:

_____ Probability/Statistics: if core math requirement was MTH 121 then MTH 112 - General Statistics or a probability and / or statistics course.

**-OR-**

_____ Quantitative Analysis: if core math requirement was MTH 112 or 212 then MTH 121- Calculus I

Choose three (12 s.h.) courses from the following:

CSC 410 (4) – Artificial Intelligence

CSC 415 (4) – Numerical Analysis

CSC 420 (4) – Game Programming and Computer Graphics

CSC 430 (4) – Advanced Programming Concepts

CSC 431 (4) – High Performance Computing

CSC 499 (4) – Research

CSC 300-400 level elective

Choose 8 s.h. from one of the following 2-course sequence:

_____ *CHM 111 (4) – Gen. Chemistry I and Lab

_____ *CHM 112 (4) – Gen. Chemistry II and Lab

**-OR-**

_____ *PHY 113 & PHYL 113 (4) – Gen. Physics I w/ Calculus

_____ PHY 114 & PHYL 114 (4) – Gen. Physics II w/ Calculus

**-OR-**

_____ *BIO 111 & 113 (4) – Intro. to Cell Biology and Lab

_____ BIO 112 & 114 (4) – Intro. to Population Biology and Lab

_____ Major Total (s.h.)