ADVICE FOR NEW COMPUTER SCIENCE MAJORS

This document contains advice to new computer science majors about what courses they should take in their first semester at CSU Stanislaus.

The student should go over the issues in this document with an academic advisor. Check the current schedule of classes for course availability. Some courses mentioned here may not be offered every semester. Also, there may be conflicts among scheduled course times that were not anticipated by the advice in this document.

NOTE: Computer Science Majors are required to receive academic advising twice a year, prior to registering for classes. Thus there will be ample opportunity for the student to work out what courses s/he needs to take next.

ADVICE FOR INCOMING FRESHMEN

REGARDING COURSES DESIGNATED "CS XXXX" FOR FRESHMEN

* If you have passed no college level programming courses: take Computer Programming I (CS 1500, lecture and lab).

* If you have passed a single one-semester course in programming with one of the following languages:
  * Java,
  * C, or
  * C++
  then take Computer Programming II (CS 2500, lecture and lab).

* If you have passed a single one-semester course in programming with some language other than those listed above, you should probably take CS 1500. However if you are willing to accept a challenge you may take CS 2500.

REGARDING MATH COURSES FOR FRESHMEN

* If you have completed the equivalent of first-semester calculus, try to sign up for Calculus II (Math 1420);

* Else if you have a score in the range 50–80 on the ELM test or are exempt from taking it, AND you have passed the equivalent of Trigonometry (MATH 1080), OR Precalculus (MATH 1100) with a C- or better, try to sign up for Calculus I (MATH 1410);

* Else if you have a score in the range 50–80 on the ELM test or are exempt from taking it, AND you have NOT passed the equivalent of Trigonometry (MATH 1080), OR Precalculus (MATH 1100) with a C- or better, try to sign up for Trigonometry (MATH 1080), OR Precalculus (MATH 1100);

* Else if you have a score in the range 38–48 on the ELM test, try to sign up for Intermediate Algebra for Math/Science (MATH 110);
* Else if you have a score in the range 0–32 on the ELM test, try to sign up for Pre-And Beginning Algebra (MATH 103).

* **ALSO**, if you have a score in the range 50–80 on the ELM test, have passed an intermediate algebra course (Math 106 or Math 110), or have the equivalent of any of these, you may sign up for Statistics (Math 1600).

* **AND**, if you have completed the equivalent of first-semester calculus, instead of Math 1600, you may sign up for Probability and Statistics (Math 1620).

* **ALSO**, if you have completed the equivalent of Precalculus (Math 1100) or higher, you may sign up for Discrete Structures (Math 2300).

* If you have completed a first-semester course in calculus, you may sign up for General Physics I (PHYS 2250–2252).

REGARDING SCIENCE COURSES FOR FRESHMEN

You are required to pass a two-semester biology, chemistry or physics sequence (with laboratory), ideally before the end of your sophomore year. (Check with an advisor if you think you may have Advance Placement (AP) credit for one or more of these courses.)

* If you want to take biology, you may start by signing up for General Biology I (BIOL 1050).

* If you want to take chemistry, you may start by signing up for Principles of Chemistry I (CHEM 1100–1102).

REGARDING ALL OTHER COURSES FOR FRESHMEN

If, after following the directions above as best you can, you have 11 units or less, you might want to take one more course. (This assumes you want to be a 'full-time' student) Pick a GE course in an area where you need to satisfy a requirement. Try to choose something that will be interesting and not overly demanding.

You can get help choosing GE courses from New Student Orientation staff or staff in the First-Year Programs and Advising office (MSR 180, (209) 667-3304).
ADVICE FOR TRANSFER STUDENTS

REGARDING COURSES DESIGNATED CS XXXX FOR TRANSFER STUDENTS

* If you have passed a single one-semester course in programming with one of the following languages:
  * Java,
  * C, or
  * C++
  then take Computer Programming II (CS 2500, lecture and lab).

* If you have passed two semesters of programming in Java, C, or C++, you should soon take Data Structures and Algorithms (CS 3100).

* If you have passed two semesters of programming in Java, C, or C++, and have not yet passed a course in assembly language, then you should soon take Assembly Language (CS 2700).

* You may want to ask for advice on whether to take both CS 2700 and CS 3100 in the same semester.

REGARDING MATH COURSE FOR TRANSFER STUDENTS

* See the advice on page 1, under the title: "REGARDING MATH COURSES FOR FRESHMEN"

REGARDING SCIENCE COURSES FOR TRANSFER STUDENTS

* If you have not passed any college level chemistry or physics courses with lab, then follow the advice in the section above entitled "REGARDING SCIENCE COURSES FOR FRESHMEN" (page 2).

* If you have had a semester or two of biology, chemistry, or physics with lab, check with your academic advisor to see if your courses are acceptable to the Computer Science Department.

* If none of your science courses is acceptable, then follow the advice in the section above entitled "REGARDING SCIENCE COURSES FOR FRESHMEN" (page 2).

* If you have passed an approved first-semester biology course, then you may take General Biology II (BIOL 1150).

* If you have passed an approved first-semester chemistry course, then you may take General Chemistry II (lecture and lab: CHEM 1110 and CHEM 1112).

* If you have passed an approved first-semester physics course, then you may take General Physics II in the spring, when it is offered (lecture and lab: PHYS 2260 and PHYS 2262)
REGARDING ALL OTHER COURSES FOR TRANSFER STUDENTS

If you need more units (normally you need 12 to get financial aid), choose GE courses to satisfy requirements.

You can get help choosing GE courses from New Student Orientation staff or staff in the First-Year Programs and Advising office (MSR 180, (209) 667-3304).