The following passage comes from a college level Marine Biology textbook, *Marine Ecosystems*. This excerpt is from Chapter 4.2 “Diversity in the Coral World.” The questions that follow will help you decide which transferrable college reading course is best for you at Mt. SAC.

### 4.2.1.2. The orders of magnitude of diversity in the coral world versus other biomes

Coral environments are considered to be one of the most diverse ecosystems in the world, the marine equivalent of tropical forests on land. It is, however, difficult to quantify the difference between coral environments and other environments, because on the one hand, outside of the vertebrates and a few other groups, the biodiversity data is poorly known [APP 12, PLA 11], and on the other hand, there are distinct ideas of biodiversity:

- the overall diversity, i.e. all species living in a given ecosystem;
- the diversity density i.e. the number of species per unit area (or unit volume).

These two concepts are used to assess diversity. Conceptually, it is possible to have a high overall diversity but a relatively low density diversity, which would imply that, from one place to another, the species differ (high beta diversity 3 [KOL03]). In the attempt to locate the diversity of coral reefs compared with other ecosystems, we are going to analyze two examples: fish and mollusks. There are approximately 32,800 species of fish currently described in the world [FIS 10], 17,200 of which are marine species. There are 7,300 species of reef fish [KUL13]; given that reefs represent an area of 0.02% of the marine environment, these figures show that the number of species per unit area is high. At present, we do not know of any other marine environment with such densities of fish. Some geographical comparisons, however, provide an overview of this diversity. Around New Caledonia, there are approximately 1,800 species of reef fish [FRI 11] with a coastline of approximately 1,500 km. In the Europe-Mediterranean zone, from the north of Norway to the mouth of the Nile, there are approximately 1,100 species within the same depth range for a linear coastline of over 30,000 km. However, a comparison with continental waters offers a very different perspective. In the Indo-Pacific, there are approximately 4,800 species of reef fish. The Amazon basin has less species (approximately 3,500 [JUN 07]) but in a biogeographical area that is approximately twenty times smaller.

1. Given that the passage above is typical for an introductory general education science textbook, which statement best applies to you?

- I am **not confident** in my understanding of this reading and would want significant help from my instructor or a tutor to interpret and explain its meaning in a written assignment or on an exam.

- I am **somewhat confident** in my understanding of this reading but would want a little help from my instructor or a tutor to interpret and explain its meaning in a written assignment or on an exam.

- I am **confident** in my understanding of this reading and am confident I could interpret and explain its meaning on my own through a written assignment or on an exam.

2. Typically, college courses require 25-30 pages or more of weekly reading throughout the semester; instructors expect students to be able to demonstrate their reading skills through written assignments and exams. Given this fact, which statement best applies to you?

- I am **not confident** that I will be able to complete all of the required reading and fully understand the importance of the content without significant help from my instructor or a tutor to interpret and explain its meaning.

- I am **somewhat confident** that I will be able to complete all of the required reading and fully understand the importance of the content but would want a little help from my instructor or a tutor to interpret and explain its meaning.

- I am **confident** that I will be able to complete all of the required reading and fully understand the importance of the content on my own.
If you answered “not confident” to one or both of the above questions, you may want to consider taking READ 90: Reading College Texts. This course focuses on

- exploring effective college textbook reading process,
- developing vocabulary,
- applying cross-disciplinary textbook analysis, and
- increasing comprehension and critical thinking.

(Completion of READ 90 with a grade of “C” or higher meets the graduation reading competency for an AA/AS degree; READ 90 is not required for an AA-T/AS-T degree.)

If you answered “confident” or “somewhat confident” to both of the above questions, you may want to consider enrolling in READ 100: Analysis and Critical Reading. This critical reading course focuses on

- effective use of critical thinking in a cross-disciplinary framework,
- development of critical reading skills, and
- applying interpretation, analysis, and evaluation of a variety of academic texts across disciplines.

(Eligibility for READ 100 meets the graduation reading competency for an AA/AS degree; taking READ 100 is optional; READ 100 is not required for an AA-T/AS-T degree.)