



General Education Biology College Algebra Learning Community

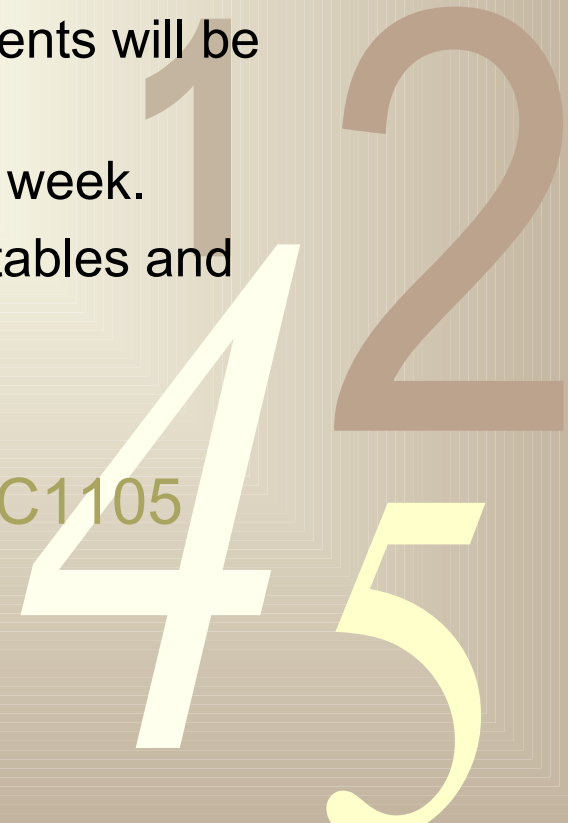
Fall 2007

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Learning Community

- Target courses: General Education Biology (BSC1005) and College Algebra (MAC1105)
- Max students: 25 (5 groups; 4-5 members each)
 - “Closed community”; namely, same students will be attending both classes.
 - Classes “back-to-back” meeting twice a week.
 - Special classroom equipped with round tables and computers.
- Courses will be taught in fall 2007
- Combined syllabi: BSC1005 MAC1105



Outcomes for Students

- Communicate effectively using listening, speaking, reading, and writing skills.
- Use quantitative analytical skills to evaluate and process numerical data.
- Solve problems using critical and creative thinking and scientific reasoning.
- Formulate strategies to locate, evaluate, and apply information.
- Demonstrate knowledge of diverse cultures, including global and historical perspectives.

Outcomes for Students, cont.

- Create strategies that can be used to fulfill personal, civic, and social responsibilities.
- Demonstrate knowledge of ethical thinking and its application to issues in society.
- Use computer and emerging technologies effectively.
- Describe how natural systems function and recognize the impact of humans on the environment.

Projects



- Waste-to-Energy Management
- Miami Dade County Water Sustainability



Waste-to-Energy Management



- Students will be engaged in data collection and data analysis at a local power plant. At the end of the project, students are expected to quantify the effect of waste management using mathematical models.
- Students shall develop skills in data manipulation and data presentation (graphs, charts). Extensive use of technology will be required.

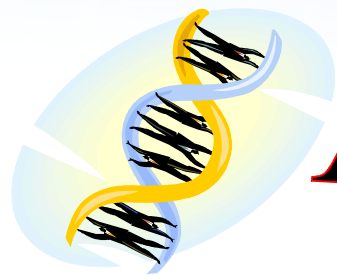


Miami Dade County Water Sustainability

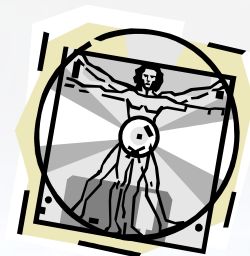


- Dual enrollers will be asked to be environmentalists and water conservation planners by working with the *Miami Dade Water and Sewage Department*.
- Students shall develop skills on survey design and hypothesis formulation, data collection and data analysis. Students will develop communication skills and presentation skills.





ATTENTION



**Are you planning to take BSC1005 - General Biology in the Fall 2007-1 term?
Do you also need to register for MAC1105 - College Algebra?**

If you answered YES to these questions, don't miss out on a great opportunity to be involved in a new learning community in the Fall 2007-1 semester.

Advantages to you:

- Back-to-back classes
- In-class peer tutoring groups
- Reinforcement of biology concepts in algebra, and vice-versa
- Special group projects that help bring both courses together

For more information, contact one of the lead faculty members:



MAC1105 (Ref 433024)

Miguel A. Montanez, Math
Room 1543; 305-237-7995
TR 9:50 – 11:05 AM



BSC1005 (Ref 419530)

Juan Morata, Biology
Room 1602; 305-237-7963
TR 11:15 AM – 12:30 PM



<http://faculty.mdc.edu/mmontane/lc.htm>