

# STEM ADVISORY COMMITTEE MEETING

March 6, 2009 11:30-1:00 AD 206

Present: Diana Gill, Lan Hao, Dana Hester, Kim Holland, Irene Malmgren, Jim McClain, Esmeralda Medrano, Kay Nguyen, Michelle Plug, Eric Rabbitoy, Justina Rivadeneyra, Sylvia Smythe, Eleanor Tsark

## Things Done:

- STEM Director Updates: - Sylvia Smythe
  - Sylvia gave a special thanks to Irene, Rosie, Marcy, Esmeralda, Leigh, Eleanor, Dana, Eric, Jim and Diana, who have supported the grant and been working very hard.
  - Sylvia introduced Eleanor Tsark, our new STEM Science Project Coordinator, and Kay Nguyen, the research analyst working with Lan Hao on the STEM Grant.
- Science Project Coordinator Updates: - Eleanor Tsark
  - Eleanor gave a handout of the Grant Objectives she is working on.
  - With the help of Marcy Morris, Eleanor has introduced supplemental instruction for two courses identified as high-risk courses – BIO 105 and BIO 220.
  - 9 SI Leaders for BIO 105 and 1 SI Leader for BIO 220 have been hired. They attend all classes, the lab, and hold 3 weekly SI review sessions for students. Eleanor and Marcy gave the SI Leaders 9 hours of training.
  - We will possibly be sending chemistry tutors to Glendora high school, and may possibly open the doors to the STEM Center here for high school students to come for tutoring in chemistry.
  - We were invited to La Fetra Elementary School's science fair and took a Citrus student along, to do a DNA demonstration.
  - We have begun our Speaker Series.
- Science Faculty Lead Updates: - Dana Hester
  - Our new biology degree has passed through tech review and will go before curriculum, and more degrees are being worked on in chemistry, physics and astronomy.
  - A Girl Scout troop came for a tour of our labs, nursing program, and dental hygiene facilities.
  - We are putting a skill award together with a techniques type of emphasis.
  - We are working on an introductory course covering basic science techniques such as making solutions, keeping a lab notebook, and safety.
  - With our Speaker Series, we are looking into having practitioners come to talk about what they do in the field.
  - Some students from our ULV partner are coming to help prepare and deliver lab material. And 56 of our students in the majors' course will be going to ULV to conduct a lab.
  - We are having a meeting with people from UCR and UC Fullerton, to talk about articulation and curriculum, to create a pathway for transfer coaches.
  - We are also working on establishing a connection with UCI and Cal Poly Pomona.
  - We are looking into offering tutoring for some on-line science courses.

- There are plans for showing some movies for Citrus students and possibly ULV students (An Inconvenient Truth and Angels and Demons) along with a speaker.
  - Michelle Plug knows of some possible speakers to bring on campus.
- City of Hope may reserve 1 spot for a Citrus student, for their summer internship program, and possibly 1 spot for an under-represented student.
- The GATE Academy will be broadened this year to include non-GATE students, and will be called the Summer Science Academy. We will pair a Glendora Unified teacher with one of our teachers, and will have 2 teachers in the lab at all times.
- Dana asked about the possibility of having a scribe to take down information from the younger students when visiting elementary schools, possibly using Survey Monkey. Maybe a student tutor could serve as a scribe.
- Math Faculty Lead Updates: – Esmeralda Medrano
  - More tutors are being hired.
  - Citrus math tutors will begin tutoring within Glendora USD at 2 different sites, and we are waiting to hear from 2 other sites.
  - They have begun working on the PAGE program (Pre-Algebra, Algebra, Geometry Enrichment) where students are invited from middle schools to come take classes here, and the program is expanding to reach more students.
  - 4 of our faculty members are conducting Calculus Enrichment Workshops.
  - 20% of instructors are conducting office hours in the tutoring lab.
  - Tutor training is conducted by instructors.
  - There are 2 tutors in the tutoring lab each hour, with between 6 to 25 students being tutored at any given hour.
    - Lan asked questions regarding tracking students in these different offered areas.
- Technology Updates: - Jim McClain
  - We have ordered a video conferencing system which allows us to stream video over the internet and intranet, and offer on-line tutoring and counseling. We are also purchasing a larger portable system which could be used in a classroom setting. The control unit is expandable and has the ability to digitally record conferences, classroom discussions and demonstrations.
  - We are looking into purchasing some kind of system for MA 225, possibly “dumb terminals” with a central remote station, known as “virtual desk tops”. Leigh is working on the information for purchasing.
  - We have purchased an enrollment management system which will allow us to better manage the scheduling and enrollment for courses. The research office will benefit greatly from this system in the ability to clarify concepts, reach common understanding, data, definition, extraction, etc.
  - We are getting some quotes on video production, post-production and closed captioning services for both long and short duration video clips.

- Assessment: - Lan Hao
  - Lan & Sylvia are meeting monthly for an Internal Evaluation, for discussing the collection of data. They have a representative from science but would like a representative from math also.
- Articulation/Degrees: - Michelle Plug
  - Michelle is putting together packets to help facilitate degree options.
  - They are creating major-to-major articulation.
  - They are looking into dual enrollment options where students take a class here & on another campus.
  - They are looking into the possibility of students doing research with an Instructor with one of our partner colleges.
    - Facebook: Michelle mentioned we may want to get STEM up on facebook, and we could advertise upcoming events.

### **Things Left Undone:**

- Publicity/Giveaways:
  - Sylvia will be looking for some help with publicity.
  - There will be an article on STEM in the next weekly bulletin.
- BlackBoard Updates:
  - We have a STEM Blackboard site, but it has not been updated.
- Math Project Coordinator:
  - We don't yet have a math full-time person. So for now, we're hiring faculty to do some of the pieces.
    - We aren't ready to fill the math position with someone from science, because math faculty have asked that we wait and see if we can fill the position with a math person. We will wait until the end of term before looking at alternatives. We are looking into some math people who might fill the position, and taking some fliers to a few math conferences to advertise the position.
- Plan MA 130:
  - We will be planning MA 130 and the math and science computer lab, to open this fall.

**Mid-year Report:** An update on activities and money spent during October 1 through March 30 is due April 27, 2009. Year 2 funding will be based on what we've done in the first 6 months of the grant. Year 1 allocation is \$1,522,664, and by the end of March we will have spent over \$600,000, which will be 40% plus of year 1 money.

### **Other Updates:**

- Citrus Network:
  - This will be the person that is going to connect with industry partners and community partners. We have been so busy that we don't have a person for this position yet. If there are any ideas on someone to fill the position, please let Sylvia know.
- Project Overview:
  - Under every activity that we planned for year 1, with the exception of dual enrollment and the outreach network, we have made progress.

- Logo:
  - The STEM logo has been voted upon, chosen and approved by Dr. Perri.
- Outreach with Glendora Unified:
  - Eric & science faculty met with Glendora Unified teachers & administrators - from the high school, continuation school, and both middle schools - to discuss some joint needs they may have, how we may be able to meet those needs, and to foster some interaction between our teachers and their teachers. What has come out of this is:
    - The tutoring that Esmeralda spoke about.
    - Eric has taken some equipment to the schools that they are borrowing.
    - They are using our curriculum.
    - We are bringing the Glendora HS students to Citrus this semester to do an anatomy/physiology lab.
    - We are purchasing new microscopes, and the old microscopes are being donated to the high schools.
- STEM Center:
  - There is an interim location for the STEM center, MA225, that is up and running.
  - We have supplemental instruction going on every day.
  - We have calculus workshops going on every day.
  - The guest speaker series is beginning this month (March).
  - The permanent STEM Center will open in the fall, in MA130, which is next to the math and science computer lab with 75 computers in MA129.
- CalPASS: Justina attended a meeting in which she learned that CalPASS could provide us with statistic numbers.
- STEM Counselor: Today is the deadline for applications for the STEM dedicated counselor. Interviews will begin and we should have the position filled by the end of March.
- CTE: A major goal for year 2 is for a pathway to our own career and technological information.
- STEM Week: It may be that the GATE Academy replaces STEM week for this summer, and then we will work on STEM week for next summer.
- Career Development Workshops: The Career Development Workshops started last year, and this year they are offering one in Careers in Engineering and one in Careers in Health Professions.

The meeting was adjourned at 1:30. We will meet one more time this term.