**Authorization To Offer Non-Degree Extension Credit Course Through Extended Studies**

<table>
<thead>
<tr>
<th>1. Desired Term: Summer 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>2a. Course abbreviation and Number: EDST E1002</td>
</tr>
<tr>
<td>2b. Abbreviated Title: Biotech Curriculum Connection (No more than 25 characters, including spaces)</td>
</tr>
</tbody>
</table>

| 4. Number of Units: 1 |
| 5. Billing Units: 1 |

| 6. Allowed Student Levels: UG X GR X EE X (Default is to check all three levels) |

<table>
<thead>
<tr>
<th>7. Grading Method:</th>
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</thead>
<tbody>
<tr>
<td>N Normal (N) (Default is Letter Grade +/-, Students may request Credit/No Credit)</td>
</tr>
<tr>
<td>______ Normal Plus Report-in-Progress (NP) (As for Normal; also allows Report-in-Progress)</td>
</tr>
<tr>
<td>______ Credit/No Credit Only (C)</td>
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<tr>
<td>______ Credit/No Credit or Report-in-Progress Only (CP)</td>
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<tr>
<th>8. Mode of Instruction:</th>
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<tbody>
<tr>
<td>(See pages 17-23 at <a href="http://www.calstate.edu/cim/data-ecom-dic/apdb-transaction-DED-SectionV.pdf">http://www.calstate.edu/cim/data-ecom-dic/apdb-transaction-DED-SectionV.pdf</a> for definitions of the Course Classification Numbers)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Instruction</th>
<th>Number of Credit Units</th>
<th>Instructional Mode (Course Classification Number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>1</td>
<td>C-02</td>
</tr>
<tr>
<td>Activity</td>
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<tr>
<td>Lab</td>
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<tr>
<th>9. Attributes: Course Requires Consent for Enrollment? Yes X No</th>
</tr>
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<tbody>
<tr>
<td>Faculty Credential Analyst Dean Program/Department - Director/Chair</td>
</tr>
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</table>

Prerequisites: 
Co-requisites: 

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<tr>
<th>10. Does this course impact other discipline(s)? (If there is any uncertainty as to whether a particular discipline is affected, check &quot;yes&quot; and obtain signature.) Yes X No</th>
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</thead>
<tbody>
<tr>
<td>If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.</td>
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</table>

Biotechnology see email att. Support Oppose 

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Signature</th>
<th>Date</th>
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<tbody>
<tr>
<td>Support</td>
<td>Oppose</td>
<td></td>
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</tbody>
</table>

Important: Please Complete

1. Instructor: Martin Ikanda

2. Extension Course Proposal Form attached

**SIGNATURES: (COLLEGE LEVEL)**

1. Program Director/Chair: 
   Date: 4-5-07

2. College Dean (or Designee): 
   Date: 4-9-07

**SIGNATURES: (UNIVERSITY LEVEL)**

3. Dean of Extended Studies (or Designee): 
   Date: 4-16-07

4. Vice President for Academic Affairs (or Designee): 
   Date: 4-30-07
OFFICE OF EXTENDED STUDIES
EXTENSION COURSE PROPOSAL FORM

In planning the components of our Extended Studies program at Cal State San Marcos, this office consults closely with the academic colleges and departments to determine the suitability of course content, teaching methods and instructor qualifications. To assist us in evaluating your proposed course for credit, please submit this completed form to our office as soon as possible. Questions before you submit? Call me at (760)750-8713.

- **Course Title:** Biotechnology Curriculum Connection

- **Course Description:**
This course is mainly geared towards biology, chemistry and physics high school teachers that are interested in updating their curriculum and knowledge of the fast growing biotech industry. Following a general overview of the region's industry and California Standards discussion, participants will be hosted to site visits and tours of some of San Diego County's prominent biotech companies and institutes that focus on this technology. Upon return to the classroom, colloquiums and curriculum simulations will result in updating or creating completely new lesson plans for their upcoming school year.

- **Course Objectives:**
By exposing teachers to real world experiences in the biotech industry, they will gain new skills, knowledge and resources that can refresh and update the curriculum and activities they use in their classrooms. With this additional understanding, they can also help to identify and encourage their students, who are the future workforce for our growing biotech industry that leads the nation.

- **Evaluation:** The basis for grades will be based on participation, finished lesson plans and assignments.

- **Course Length:** 20 hours instruction; 20 hours of Biotech industry visits and demonstrations

- **Proposed Date(s):** July 30 – August 3, 2007

- **Location:** Biogen Idec Community Lab

- **Support Needs:** None (Biogen Idec Community Lab & San Diego Workforce Partnership provides all necessary supplies)

- **Comments:** This is the third year of this teacher externship sponsored by San Diego Workforce Partnership, funded by a grant by US Dept. of Labor – Employment and Training Administration. The intent of this program is to motivate teachers to interest students in Life Sciences at earlier ages.

*When completed, please return this form to: Catherine Boyle, Office of Extended Studies, Cal State San Marcos, 333 S. Twin Oaks Valley Rd., San Marcos, CA 92096; FAX: (760)750-3138; E-mail: cboyle@csusm.edu*
**LIFE SCIENCES SUMMER INSTITUTE**  
*Week 2 – Industry Externships & Curriculum Connection*

**Location:** Biogen Idec Community Lab  
**Instructors:** Marty Ikkanda/Sandy Slivka/Sharon Price  
**Teacher Leads:** TBD

<table>
<thead>
<tr>
<th>TIME</th>
<th>MONDAY (7/30)</th>
<th>TUESDAY (7/31)</th>
<th>WEDNESDAY (8/1)</th>
<th>THURSDAY (8/2)</th>
<th>FRIDAY (8/3)</th>
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<tbody>
<tr>
<td>8:00 AM</td>
<td>Industry Externship – Location(s): TBD</td>
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<td>9:00 AM</td>
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<td>10:00 AM</td>
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<td>11:00 AM</td>
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<td>12:00 PM</td>
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<td>1:00 PM</td>
<td>Standards Discussion II: What are you going to do differently? Look at year-long calendar and syllabus, discuss how you will incorporate new curriculum</td>
<td>Lab Group: Amgen Bruce Wallace lab curriculum simulation &amp; incorporation – scheduling and troubleshooting (teacher/student experience)</td>
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<td>Finalize all assignments: Group and Individual Presentations, and Curriculum Incorporation Revisit personal statement and discuss what they learned</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Salk DNA Extraction Lab</td>
<td>Down-time: work on Group and Individual Presentations, and Curriculum Incorporation</td>
<td>Down-time: work on Group and Individual Presentations, and Curriculum Incorporation</td>
<td>Down-time: Work on incorporation of curriculum to address standard(s) identified – book classroom visits w/ SP</td>
<td>Weekly Evaluation Share PowerPoint Presentations/curriculum incorporation to class/guests Certificate Presentation and Happy Hour – Location TBD</td>
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<tr>
<td>3:00 PM</td>
<td>Teacher Best Practices Share-out</td>
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<td>Go through NIH website and discuss various resources, SCBC, etc. Handout/Resource guides</td>
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<td>4:00 PM</td>
<td>Daily Wrap-up &amp; expert assignment share-outs</td>
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</table>
Virginia Mann

From: Bianca Mothe
Sent: Thursday, April 26, 2007 2:20 PM
To: Virginia Mann
Subject: Re: "Biotech Curriculum Connection" proposal

This looks fine to me. I worked with Al Kern initially on this.
B

On 4/26/07 1:35 PM, "Virginia Mann" <vmann@csusm.edu> wrote:

Bianca - have you had a chance to review this Extended Ed course yet?

Thanks,
Virginia

From: Virginia Mann
Sent: Monday, April 23, 2007 9:33 AM
To: Bianca Mothe
Cc: Catalina Huggins
Subject: FW: "Biotech Curriculum Connection" proposal

Bianca,

I apologize - I believe I neglected to attach the proposal from Extended Studies. Please let us know if you have any comments or concerns regarding this course.

Thanks,
Virginia

From: Virginia Mann
Sent: Tuesday, April 17, 2007 10:42 AM
To: Bianca Mothe
Cc: Catalina Huggins; David Barsky
Subject: "Biotech Curriculum Connection" proposal

Hello Bianca,

Extended Studies has sent us the attached proposal to offer non-degree extension credit for "Biotech Curriculum Connection". Would you please review this proposal and let us know if you have any comments or concerns.

Thank you,
Virginia

Virginia Peters Mann
Curriculum Specialist
Academic Programs
CSU San Marcos
Tel: (760) 750-8887

4/27/2007
Educational Background:
M.S. Oregon State University, 1970
B.A. California State University, Long Beach, 1968

Relevant Experience:
2005-present Consultant for educational outreach. Amgen, Inc
2005 Presenter Summer Teacher Institute, Biogen-Idec. Funding agencies:
  Department of Labor, San Diego Workforce Partnership and BIOCOM.
2005 Presenter Recombinant DNA and Protein Expression workshop funded by BABEC
2001 Author and developer of AMGEN-Bruce Wallace Biotechnology Program
2001 Participant Human Genome Project, University of Washington
1999-present Teaching faculty for UCLA 's Center for Academic and Research
  Excellence. Funding agencies: National Science Foundation, National Institutes of
  Health and the Howard Hughes Medical Institute. Program Director: Richard
  Weiss, Chemistry and Biochemistry Department, UCLA
1999 Presenter, Recombinant DNA workshop for the UCLA Bridges program. Funding
  agency the National Institutes of Health, UCLA Bridges Program and the Los
  Angeles/Orange County Biotechnology Center. Bridges Program Director:
  Richard Weiss, Chemistry and Biochemistry Department, UCLA
1998 First recipient, Teacher of the Year Award, presented by the Pierce College
  Professors Emeriti
1998-present Co-presenter, The Science and Ethics of Biotechnology for college and
  high school faculty. Sponsored by the Partnership for the Advancement of
  Chemical Technology, Miami University, Middletown
1997 Participant, Human Genome Analysis workshop, Foothill College. Sponsored by
  Cold Spring Harbor.
1997 Co-presenter, Recombinant DNA workshop for the UCLA Bridge Program.
  Funding agency NIH and the UCLA Bridges program.
  Experimental learning community course funded by the Department of Education.
1996 Co-presenter, Biotechnology at Pierce College.@ CSUPERB conference on
  Biotechnology, California Polytechnic College, Pomona.
1996 Principal investigator, NSF-ILI grant: Implementation of Biotechnology in
  Majors Biology. DUE 9551346
1994 Participant, Introduction to Recombinant DNA Technology and Genome
  Analysis. Sponsored by Cold Spring Harbor Laboratory.
1993 Participant, Vector Workshop Program in Advanced DNA Science. Sponsored
  by Cold Spring Harbor Laboratory.

Other:
1971-present Professor of Biology, Los Angeles Pierce College.
1997-present Advisory Board member, Central Coast Biotechnology Center.
1996-present Director of educational outreach Los Angeles/Orange County
  Biotechnology Center at Pasadena City College.
1988-1995 Chairman, Life Science Department, Los Angeles Pierce College.