Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

1. This request is submitted by the Department of Biochemistry and Biophysics

2. Course prefix, number and complete title of course: BICH 675 Plant Biochemistry and Genomics

3. Course description (not more than 50 words): Overview of current literature dealing with plant biochemistry/genomics. Biochemistry topics will include the function of protein-protein interactions related to plant specific processes such as plant-pathogen interactions. Genomics topics will focus on current analysis of plant genomes and how the derived information is being utilized to elucidate biochemical pathways.

4. Prerequisite(s) graduate classification

5. Is this a variable credit course? □ Yes □ No If yes, from __________ to __________

6. Is this a repeatable course? □ Yes □ No If yes, this course may be taken ______ times. Will the course be repeated within the same semester/term? □ Yes □ No

7. Has this course been taught as a 289/489/689? □ Yes □ No If yes, how many times? ______ Indicate the number of students enrolled for each academic period it was taught. 2008/6

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      N/A
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      M.S., Ph.D. in biochemistry, biology, genetics, horticulture, soil and crop science, plant pathology.

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (excluding punctuation)
      BICH 675 PLANT BICH & GENOMICS

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>Subject Matter Content Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
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<td>003632</td>
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Approval recommended by:

Head of Department ___________________________ Date 7/11/08
Chair, College Review Committee ___________________________ Date

Head of Department (if cross-listed course) ___________________________ Date 6/25/08
Dean of College ___________________________ Date 9/4/08

Submitted to Coordinating Board by:

Director of Academic Support Services ___________________________ Date

Questions regarding this form should be directed to Sandra Williams at 845-8836.
OAR/AS — 04/07

1 of 4 C20
BICH 675
Plant Biochemistry and Genomics

Instructors:
Tim Devarenne    tpd8@tamu.edu    862-6509    office: 338A Bio/Bio
John Mullet      jmullet@tamu.edu 845-0722    office: 306A Bio/Bio

Prerequisite: graduate classification

Class time: Fridays 1:00 PM – 2:00 PM

Room: 106A, Bio/Bio

Grading: A: 90 – 100
B: 80 – 89
C: 70 – 79
D: 60 – 69
F: below 60
- grades will be based on 60% class presentation and 40% class participation

Web Page: http://tamuweb.tamu.edu/faculty/tpd8/BICH689/index.htm

Course Topics: This course will utilize the latest published plant science articles in leading scientific journals to discuss topics of plant biochemistry and genomics. Plant biochemistry topics will focus on the area of plant-microbe interactions. Plant genomics topics will focus on the current analysis of plant genomes and how the information derived from these genomes is being utilized to elucidate biochemical pathways of metabolism, signaling, growth, development and adaptation to adverse environments.

Course format and expectations:
• Each class period an approved paper will be discussed. The discussion will be lead by one student who is responsible for researching the background information about the paper before class and presenting a 10 – 15 minute introduction. The introduction should cover the background for the paper in terms of what was known prior to publishing of the paper.
• The paper presenter should prepare slides of each figure in a large readable format.
• All class members are required to read and understand, in detail, each paper so that the figures can be discussed by everybody in the class. A selected individual or volunteer will be responsible for leading the discussion on each figure.
• All class members should be prepared to discuss strong and weak points of the paper, methods used, other methods that could have been used, and the conclusions presented by the authors.

Paper Selection:
• Selected papers should focus on either the biochemistry behind plant-microbe interactions or a topic in plant genomics.
• The papers should have been published with in the last 12 to 24 months.
• Papers need to be approved by the assigned professor by the Thursday the week before each presentation.
• A pdf file of the paper and any supplemental material should be emailed to the assigned professor by the Friday before your assigned discussion date.
• The pdf file will be posted on the class we page (http://tamuweb.tamu.edu/faculty/tpd8/BICh689/index.htm) by Saturday. All students are responsible for downloading their own copy of the paper.

Presentation:
• Each paper introduction presentation should be in PowerPoint format.
• Each figure from the paper should be enlarged and readable for use either as a PowerPoint slide for viewing from a digital projector or in overhead projector format.

Class Attendance:
• Class attendance is required and unexcused absences will lower your grade.

Course Material: Papers should be selected from current scientific journals such as Plant Cell, Plant Physiology, Plant Journal, Plant Molecular Biology, PNAS, Cell, Science, Nature.

Presentation Schedule:

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<tr>
<th>Date</th>
<th>Presenter</th>
<th>Paper Approver</th>
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<tbody>
<tr>
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<td>Tim Devarenne</td>
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<td>Mar 14</td>
<td>Spring Break</td>
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<td>Mar 21</td>
<td>Reading Day</td>
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Americans with Disabilities Act (ADA) Policy Statement
The following ADA Policy Statement (part of the Policy on Individual Disabling
Conditions) was submitted to the University Curriculum Committee by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for information. The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637.

Academic Integrity Statement
All syllabi shall contain a section that states the Aggie Honor Code and refers the student to the Honor Council Rules and Procedures on the web.

Aggie Honor Code
"An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: www.tamu.edu/aggiehonor/ On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge shall be preprinted and signed by the student:
"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."