The survey on math 1111 topics was discussed. The results were presented. From the survey results the committee decided that certain topics should not be required but that they might be considered optional. The optional topics included the following from the original survey:

4. Do you believe MATH 1111 students should be required to solve a system of 3 or more linear equations using the Echelon method without calculator assistance? **The overwhelming majority said no.**

6. Do you believe MATH 1111 students should be required to find the vertex and axis of symmetry for nonfunction parabolas of the form \( x = ay^2 + by + c \)? **We were split on this one.**

7. Do you believe MATH 1111 students should be required to learn about and determine the focus and directrix for function parabolas? **The overwhelming majority said no.**

8. Do you believe MATH 1111 students should be required to learn about and determine the focus and directrix for nonfunction parabolas? **The overwhelming majority said no.**

Karlene Feller volunteered to look into optional problems for the Blitzer text and Kim Bennett volunteered to do the same for the Hornsby book.

The standards were written for the following topics:

**Standard for Non-function Parabolas in Math 1111**

The students should be required to find the vertex and axis of symmetry for nonfunction parabolas of the form \( x = a(y - h)^2 + k \) and of the form \( x = ay^2 + by + c \). Studies involving the focus and directrix for function and nonfunction parabolas will be addressed in pre-calculus and not in this course.

**Standard for Circles in Math 1111**

The students should learn to find the radius and center of a circle written in both the form \((x - h)^2 + (y - k)^2 = r^2\) and in the form \(x^2 + ax + y^2 + by = c\). The students should be required to find the equation of a circle given its center and radius. In addition, the student should be required to find the equation of a circle given its center and one other point on the circle.

**Standard for Matrices in Math 1111**

The students should be required to solve a system of 3 or more linear equations using only calculator assistance.
It was decided that further work could be completed by email. The meeting was adjourned at 1:30

Mary Susan Hall
Math 1111 (College Algebra) Content Survey Results
(15 responses)

<table>
<thead>
<tr>
<th>N</th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(* ) Were you able to cover all of the sections included in the college algebra Fall 2004 Teaching Guide?</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(* ) Can you effectively cover all of the sections included in the college algebra Fall 2004 Teaching Guide?</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Do you believe MATH 1111 students should be required to solve a system of 3 or more linear equations using only calculator assistance (i.e., not by hand)?</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Do you believe MATH 1111 students should be required to solve a system of 3 or more linear equations using the Echelon method without calculator assistance?</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>Do you believe MATH 1111 students should be required to find the vertex and axis of symmetry for nonfunction parabolas of the form ( x = a(y - h)^2 + k )?</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Do you believe MATH 1111 students should be required to find the vertex and axis of symmetry for nonfunction parabolas of the form ( x = ay^2 + by + c )?</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Do you believe MATH 1111 students should be required to learn about and determine the focus and directrix for function parabolas?</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>Do you believe MATH 1111 students should be required to learn about and determine the focus and directrix for nonfunction parabolas?</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>Do you believe MATH 1111 students should learn to find the radius and center of a circle written in the form ( (x - h)^2 + (y - k)^2 = r^2 )?</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Do you believe MATH 1111 students should learn to find the radius and center of a circle written in the form ( x^2 + ax + y^2 + by = c )?</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Do you believe MATH 1111 students should be required to find the equation of a circle given its center and radius?</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Do you believe MATH 1111 students should be required to find the equation of a circle given its center and one other point on the circle?</td>
<td>12</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional comments:

4. Calculator only for systems with more than 3 linear equations
5. Systems with 3 linear equations should be solved by hand (just to know the process) and by using the calculator. Understand what the solution means.

That you even ask Question number 1 upsets me. The answer must be YES for us all. Not getting through is evidence of poor planning or poor execution, not of too much material. Anyone who was given the CCO and teaching guide by the beginning of the semester has no excuse for not covering the assigned material. Slowing down for students who do not or cannot keep up is unacceptable in any course, but especially in one that is a prerequisite for another. It is unethical and unprofessional and should not be tolerated.

I think that students should *master* completing the square in 1111, and this helps them to do so.

I just went to a College Algebra symposium of teachers in 2yr and 4yr schools across the country. Most of them did *not* cover directrix and focus. I think only about 10% went into that material.

Same thing as above. The topic of conics was discussed thoroughly and most did not cover the foci, etc. for any conics.

I think that students should *master* completing the square in 1111, and this helps them to do so. At the college algebra symposium, there was unanimous agreement.
that it was important for students to know how to use completing the square to graph conic sections.

Of course, any of the above topics could be covered in 1113 but the students are clear about the fact that they find 1111 much easier than 1113. This should not be true. To be kind to the student, we should ramp up the level of math gradually, not suddenly. I strongly think the current arrangement does a better job of being fair to the student while, at the same time, improving our 1113 course.

*I think the Math 1111 curriculum was better before all the additions. I know it seems slow to some faculty but the students in Math 1111 struggle with the material and it is better to move at a nice pace and give them a chance to digest the material instead of rushing through everything.*

IT SEEMS THAT YOU PROBLEM IS THAT THINK THESE TOPICS SHOULD BE IN 1113.
THEY SHOULD!!!
THE DISCIPLINE MUST RECONSIDER THE SEQUENCE 1111-1113
We have 3 choices:
1111 3 hours + 1113 4 hours (present situation) or
1111 4 hours + 1113 4 hours or
1111 3 hours + 1113 3 hours + Trigonometry 3 hours or
1111 3 hours + 1113 5 hours