

#### **Classroom Visitation Form**

Southwestern is committed to creating a culture of excellence for our students, staff, and faculty. One of the ways we fulfill our commitment is through peer-to-peer feedback and mentorship on each other's teaching. This Classroom Visitation Form is designed to provide a framework for peer teaching observations, helping to assist the instructor in the performance of their duties, and to encourage and support their professional development over time. The form is comprised of two components: a pre-observation form, to be completed by the faculty being observed, and a post-observation form, to be completed by the observer. The two components work iteratively to promote constructive feedback, pedagogical reflection, and ongoing dialogue to promote faculty members' continual development over the course of their careers at Southwestern.

Pre-Observation Form (for Faculty being observed, please complete this form and return to the person observing your teaching)

Faculty Member: Benjamin Holt		
Course: MTH 95	Date: 11/1/2018	
Observer: Michael Winston		
Name and Topic of Class Session: Solving Equations Using Quadratic Methods		

## 1. Learning Outcomes

What is/are the objective(s) of the class session? What do you want your students to know, understand, and/or demonstrate as a result of your instruction?

I want students to be able to recognize when quadratic methods can be used to solve equations which are not necessarily quadratic. I also want students to recognize when an equation can be "massaged" into a quadratic form. Moreover, students should come away with a more general sense that mathematicians often use "old" ideas to solve new problems.

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<sup>&</sup>lt;sup>1</sup> Collective Bargaining Agreement, Article 16.1



#### 2. How do you plan to achieve this/these Outcomes?

Building upon the previous lecture in which I introduced the topic, I intend to further illustrate
the idea of "solving new problems with old ideas" with several examples of equations whose
solutions can either directly, or indirectly, be found by solving a quadratic equation.
Following what I hope to be a brief lecture, I will put students into groups to work together on a
worksheet I provide with problems similar to their online homework. The intent is to give

students immediate and guided practice before attempting homework problems on their own.

3.	<b>Instructional Techniques Being Used</b> ( <i>select all that apply</i> ):
	Lecture
	Class Discussion
	Small group activities
	☐ Individual Student Assistance
	Interactive activity
	Lab
	Web-enhanced
	Othory

## 4. What will you do to help students reflect on and enhance their learning?

What will you do to help students look back on their learning? What will you do to help students enhance their learning process?

I will have students work in smaller groups in order to help each other. Students who are stronger in the material will get a chance to articulate the ideas in their own words to other students. Students who are not as strong will have a chance to learn from their peers who have a perspective different than my own. As students work in groups, I will have the chance to work with students individually. It is my hope that by actively putting the ideas onto paper and into their own words, the delicate nature of the topic can crystallize into the next stage of understanding.



## 5. What do you hope to learn from this observation?

What feedback would you like the observer to provide during your lesson to help you better reflect on your practice?

I am particularly interested in ways to better facilitate active participation in both lecture and group work. My preference would be to have students actually present material to the class which they have worked on in groups, but there is usually not enough time to do this. Are there any particularly effective strategies for getting small groups of students to engage with the material beyond simply telling one another how to do the problems? Also, is there a more effective way to use the space in the classroom to facilitate group learning?



**Post-Observation Form** (for classroom observers, please complete this form and return to the instructor. Please note that due to the variety of activities in which our faculty engage, some of the items may not be applicable to each instructor.)

#### 1. Development of Learning Outcomes

Please describe and demonstrate (with specific examples) how and/or to what extent the objectives and outcomes identified by the faculty member were met during the class session.

The early portion of the class was focused on the review of the equation structure and several demonstrations that illustratively worked though the "manipulation" of the equation. The referencing of previous lectures via the website and examples on the board demonstrated this approach to equation manipulation to solve the new equation type. During this lecture, the students took notes, asked questions, and gave comments to facilitate their understanding. After the lecture, the students were given group work. They, in their groups, discussed the work, facilitated each other's work, and asked questions of the professor as needed. It was productive and purposeful.

# 2. Teaching Effectiveness:

$\times$	Main ideas are clear and specific
X	Sufficient variety in supporting information
X	Relevancy of main ideas was clear
X	Instructor related ideas to prior knowledge
X	Definitions were given for vocabulary

Specific examples of teaching effectiveness observed:

The main ideas of the day's lecture were presented multiple times: they were listed at the beginning of class—before the start of the lecture; they were repeated during the lecture, which included an online component; and they were repeated at different points to the student groups as needed. This repetition presented a variety of possible ways to access the content and presented the relevant and necessary skill clearly. The lecture objectives were directly connected to the previous lectures at the outset of the lesson and directly, at times, and indirectly during one-on-one help the instructor provided to the students during the group work. The defining of lesson specific vocabulary was done during the lecture. His teaching is organic and thoughtful.

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# 3. Presentation and delivery:

Communicates audibly and clearly		
☑ Establishes and maintains eye contact with students		
Varies pace and tone to keep students alert		
Uses a presentation style that facilitates note-taking		
Uses positive and appropriate humor		
Incorporates various instructional supports (film, diagrams)		
Other:		
Specific examples of teaching presentation and delivery observed:		
Professor Holt's interaction with the students was professional and relatable. He spoke clearly to		
the class and personably when engaged in one-on-one teaching moments. He was friendly at all		
times and even his "dad" jokes were well received. The other means that he used to clarify the		
lecture were the various instructional modes: PowerPoint, online examples, examples on the		
board, and individual help in the groups.		
4. Student Involvement:		
Attends respectfully to student comprehension or puzzlement		
<ul><li>Attends respectfully to student comprehension or puzzlement</li><li>Responds to changes in student attentiveness</li></ul>		
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Much of this has been stated in previous examples; however, one clear example of this took place early in the group work. A student from the group on the right side of the room asked a

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clarifying question about the beginning of the equation manipulation process. His group members listened to the question and a few nodded as the question was asked. They too seemed to need help with the stage. Professor Holt began by repeating the question differently, which drew nods from the other group members. He then ask one of the students who nodded a question about the previous step of the process. This student gave an example related to the point, which showed the student had grasped the point. Professor Holt used the student's example to lead the group through the process, answered questions from the students as the minilecture continued, encouraged them when they struggled, and congratulated them when they succeeded.

## 5. Learning environment:

Students seemed to be interested and taking notes during class
Checks for understanding periodically
Promotes student involvement
Students participated in active learning activities
Addresses potentially disruptive behaviors before they impact the learning
environment
Students were given an opportunity to apply learning through practice, project, case
studies, etc.
Creates opportunities for students to practice relevant skills
Develops student independence by encouraging students to assume responsibility for
their own learning
Solicits student feedback
Listens carefully to student comments and questions
Encourages critical thinking and analysis
Other:

Specific examples of the learning environment observed:

Professor Holt's entire class seems designed around these principles. The students took notes as he lectured. He asked questions that they were willing to answer. He created teaching opportunities from their questions and encouraged them as they struggled through the complexities of the lesson. A great moment from the interactive group work was when a student, how was struggling solved a problem with Professor Holt's help. The student said, "That's weird," and everyone in the group chuckled. Professor Holt smiled and told the student that he had done good work. It was a rewarding and humanizing moment.

## 6. Overall summary of / reflection on classroom observation

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Professor Holt is an excellent teacher. He clearly k	nows his field and is experienced enough to				
find innovative methods and means to help his student grasp the material. Additional, he clearly					
cares for his student's growth and success. Without fail, he works with each student until they understand the problem and process and then encourages them to repeat the process in an attempt					
to show mastery. It is a confidence building exercise for the students even if they miss the growth					
as it happens.					
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Peer Review Member's Signature	Date				
Faculty Member's Signature	Date				

The Faculty Member's signature acknowledges review and receipt of this form and does not constitute agreement.