**EE400D (Teaching Engineering): Classroom Observation**

Faculty/Instructor: Payman Arabshahi Date/Time of Observation: 10/25/2019 11:30 – 12:50

Observer: Ziqiao Xu

Course Number (Course Title): EE496

Format Observed (Lecture, Lab, Quiz Section): lecture

Number of Students Enrolled: 73 Number of Students Attending: 59

**Instructions**

*This observation worksheet contains both close-ended (Likert Scale) questions and open-ended (descriptive) questions regarding what the instructor is doing during the observed time period (session) and what the students are doing. Not all behaviors or activities are covered in the close-ended questions; those activities that are not included in the close-ended questions can be integrated into the open-ended questions. Please highlight your answers in a different, but legible color, minimize white space, and provide clean and consistent formatted in the completed observation.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| During the Observed Session: | Not at All | Somewhat | Satisfactory | Outstanding |
| The instructor provides objectives for the class session (written, verbal, or both). | X |  |  |  |
| The instructor relates the session content to learning outcomes for the course. |  | X |  |  |
| The instructor uses visual aids that are clear, organized, and relevant. |  |  | X |  |
| The instructor uses practical, “real-world” examples to support teaching. |  |  | X |  |
| The instructor refers to the relevant portions of the textbook, reading, or other supplement. |  | X |  |  |
| The instructor uses humor effectively to promote student engagement and rapport. |  |  | X |  |
| The instructor answers questions well and demonstrates knowledge of the subject. |  |  |  | X |
| The instructor shows clear interest or enthusiasm in teaching. |  |  |  | X |
| The instructor uses student names. | X |  |  |  |
| The instructor asks specific questions. |  |  | X |  |
| The instructor pauses after asking a question. |  |  | X |  |
| The instructor asks questions of students that result in responses from students. |  |  | X |  |
| The instructor changes gears periodically from one style of teaching to another. |  | X |  |  |
| The instructor engages students periodically through think/pair/share, problem solving, or other active learning exercises. | X |  |  |  |
| The instructor uses guided notes. |  |  | X |  |
| The instructor involves students periodically in what is to be covered during the session. |  |  | X |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| During the Observed Session: | Not at All | Somewhat | Satisfactory | Outstanding |
| The instructor uses more than one way to explain problems or concepts. |  |  | X |  |
| The opening of the class session gets students’ attention. |  |  | X |  |
| The instructor provides a summary of what has been covered and accomplished at the end of the observed session. |  | X |  |  |
| The instructor provides a preview of the next session or ideas of what to consider for the next class at the end of the observed session. |  |  | X |  |
| The instructor could be easily heard. |  |  |  | X |
| The instructor moves around in the classroom and refrains from standing/sitting in one place. |  | X |  |  |
| The instructor uses analogies or metaphors to relate the concepts to students’ experience. |  |  | X |  |
| The instructor emphasizes key points throughout the observed session. |  |  |  | X |
| The instructor makes eye contact with students. |  |  |  | X |
| The instructor uses open (not closed) body language during the observed session. |  |  | X |  |
| The instructor engages in behaviors that develop rapport and trust with the students. |  |  |  | X |
| The instructor relates the material/concepts to personal or societal concerns. |  |  |  | X |
| The instructor is available before class. |  |  | X |  |
| The instructor is available after class. |  |  | X |  |

What types of visual aids (dry-erase board, chalkboard, powerpoint, etc) does the instructor use during the observed session? How are these visual aids used?

The instructor uses power point as visual aids and have separate power points for different sections of the content.

In your opinion, what was the best/most effective teaching moment observed in this session?

The instructor switches gears between several topics during the class session. In order to make that less chaotic, he always provide a brief conclusion for the last section and a preview at the beginning for the new section.

In your opinion, what was the most unique teaching moment observed in this session?

After finishing the power points, the instructor does a pure lecture about projects without visual aids, and encourage students to stay in the project when they face obstacles while providing opportunities for different options in a trustful manner.

In an organized paragraph with complete sentences, describe what the instructor did throughout the session (150-250 words).

This lecture is a unique class session for the whole course because it is less than 24 hours after an event that most of the students and the instructor spend together. Since then, the instructor and students are obviously more closely connected in this class session. The professor begins the lecture by referring to

the event and ask questions of students about the attendance. The best teaching techniques the instructor use is that he cares both the students who attend the event and those who don’t. He brings back memories of the event for students who attend using humor without embarrassing those who are not there. After the introduction, he briefly goes over the content of the event, which helps those who are not there, but he adds on details that is missed in the event to keep the rest interested too. The instructor is good at building trust among students by always showing care and staying connected to the students and letting the students remember he and the school is always available for them. The instructor also asks more questions about students than previous lectures, although some of them are not effective like “Any questions?”. The instructor later switches to lecture part and uses great examples that triggers student thinking, like pushing the students to think what is easy for a specific project. Another excellent teaching method of the instructor that he does consistently through the course is that he always relates small portions and individual concepts to the big picture, or the architecture of the course, as well as the projects that the students will take. My rating for the Likert-Scale items above accords to the rating system by the end of this form. The rating system is designed to be objective and easy to observe, but I try to mix quality and quantity in my rating and avoid making the rubric overly quantifiable. My rating on this form is based the instructor’s performance with respect to other instructors in similar class sessions. The Likert-Scale items are rated notably higher for previous class sessions because this lecture is by far the most effective class session of the course.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| During the Observed Session: | None | Few | Some | Many | Most |
| Students maintain attention toward the instructor (for example – eye contact). |  |  |  | X |  |
| Students remain awake and alert during the observed session. |  |  |  |  | X |
| Students are using their cell phones or other electronic devices in activities unrelated to class. |  | X |  |  |  |
| Students are over one minute late to class. |  |  | X |  |  |
| Students pack up early at the end of class. |  | X |  |  |  |
| Students are reading the newspaper or doing other non-electronic activities unrelated to class. |  | X |  |  |  |
| Students interact with the instructor before class. | X |  |  |  |  |
| Students interact with the instructor after class. |  | X |  |  |  |
| Students initiate questions. |  |  | X |  |  |
| Students respond to questions posed by the instructor. |  |  | X |  |  |
| Students ask follow up questions. |  | X |  |  |  |
| Students participate in class when asked to do so by the instructor. |  |  |  | X |  |
| Students are taking notes. |  | X |  |  |  |

In your opinion, how would you best describe students’ interest in the observed session?

The students have strong interests in both the content of the projects that they will participate and the logistics of the project.

In your opinion, how would you best describe students’ affect (emotion) in the observed session?

The students are focused for the majority of this class, especially the beginning section.

In an organized paragraph with complete sentences, describe what the students were doing during the observed session (150-250 words).

Students in this class session are noticeably more active and excited comparing to their mood in previous lectures. Many of the students who attend the event last night are shown to be still in the mood of the successful event by talking about the event before class and respond with positive energy to related topics when the instructor mentions. Although the event last night is time-consuming, it is interesting to notice that less tiredness is shown for most of the students. Because more than half of the class session is about the detailed topic and logistics information about the project that they will take part in in future quarters, most students appear to be more concentrated than previous lectures when the class session is more about lecturing about knowledge and concepts. Students also initiate more questions in this class session than all the previous lectures combined, with a focus on the personal situations about the future projects. Most students tend to pay special attention in this class session and engage more into the lecture by responding to questions or participating in active learning activities. Most students who do activities unrelated to class on working on academic materials, and some students even talk about other coursework during the class session. The ratings of the Likert-Scale items are based on the rating system below. The rating system is specially designed for the number of students registered in this course.

Are there any items that you believe should be added to this classroom observations worksheet? If so, please describe.

Rating system:

“The instructor provides objectives for the class session (written, verbal, or both).”

I rated the instructor as follows:

Outstanding:  well-designed objectives for the specific class session, hopefully both written and verbal

Satisfactory:   clearly stated and identifiable objectives that most students can notice and understand

Somewhat:   a few ambiguous sentences about the objectives, mostly at the start of the class

Not at all:  never mention anything about objectives during the entire class session.

“The instructor relates the session content to learning outcomes for the course. “

I rated the instructor as follows:

Outstanding:  explains the connection between the session content and some specific learning outcomes

Satisfactory:   mentions learning outcomes during the class session

Somewhat:   the course content reflects the learning outcomes in implicit ways

Not at all:  a typical student can not find relationship between the overall learning outcomes and the observed class session

“The instructor uses visual aids that are clear, organized, and relevant. “

I rated the instructor as follows:

Outstanding:  visual aids have delicate details that enhance the overall quality of the lecture

Satisfactory:   the visual aids are well prepared and blend in well with the lecture content

Somewhat:   have visual aids prepared with major flaws (too few, unrelated, unorganized, visually distracting, etc.)

Not at all:  all the information is conveyed by verbal

“The instructor uses practical, “real-world” examples to support teaching. “

I rated the instructor as follows:

Outstanding:  multiple examples that support each other or one complex well-designed example that relates to real application in the related industry

Satisfactory:   at least one complete “real-world” example with clear application of the course content

Somewhat:   a few sentences about the possible application of the theories are presented

Not at all:  all the content is theoretical

“The instructor refers to the relevant portions of the textbook, reading, or other supplement.”

I rated the instructor as follows:

Outstanding:  all the related supplements are clearly stated; the course content and supplement reading are closely related and comprehending one will benefit the understanding of the other

Satisfactory:   the course content and the provided supplements fall into an acceptable area of knowledge

Somewhat:   the corresponding reading material is mentioned but unrelated

Not at all:  no relationship between course content and textbook is mentioned

“The instructor uses humor effectively to promote student engagement and rapport.”

I rated the instructor as follows:

Outstanding:  more than 4 jokes or the humor used is well-organized and helps students remember course content

Satisfactory:   3 ~ 4 jokes that catch students’ attention or 1 ~ 2 high quality ones

Somewhat: 1 ~ 2 jokes that not necessarily have good effects

Not at all:  never use any humor during the entire class session

“The instructor answers questions well and demonstrates knowledge of the subject. “

I rated the instructor as follows:

Outstanding:  answers question with knowledge relate to the big picture or use humor, analogies, or examples to help student understand

Satisfactory:   completely and clearly answer most of the questions

Somewhat:   answer question briefly but don’t provide the best answer

Not at all: refuse to answer questions or don’t know anything about basic questions

“The instructor shows clear interest or enthusiasm in teaching. “

I rated the instructor as follows:

Outstanding:  be energetic and helpful during the entire class session, express strong passion that involve the majority of the students in learning

Satisfactory:  lecture with positive energy, catch students’ attention when they feel bored, and be willing to help students

Somewhat: complete the task of teaching without expressing positive or negative emotions

Not at all:  show obvious boredom or other negative emotions in teaching

“The instructor uses student names. “

I rated the instructor as follows:

Outstanding:  have knowledge of many student names and engage the entire class by using student names

Satisfactory:   correctly use at least student names when asking questions

Somewhat:   attempt to use student name, like ask for student names, or use wrong names

Not at all:  never mention any student name

“The instructor asks specific questions. ”

I rated the instructor as follows:

Outstanding:  ask questions periodically to lead students keep thinking during class session

Satisfactory:   ask at least one question that result in clear responses from students

Somewhat:   ask ambiguous questions that are difficult for students to respond

Not at all:  never ask any questions to students

“The instructor pauses after asking a question. “

I rated the instructor as follows:

Outstanding:  pauses at the perfect timing that is not too long or too short

Satisfactory:  pauses long enough for students to think and respond

Somewhat: briefly pauses but not monitoring the students’ pace

Not at all:  never pauses after asking a question or never ask questions

“The instructor asks questions of students that result in responses from students. “

I rated the instructor as follows:

Outstanding:  ask multiple meaningful questions of students that most of the students respond

Satisfactory:   ask at least one question of students that many students respond

Somewhat:   attempt to ask questions of students but don’t receive response

Not at all:  never ask questions of students

“The instructor changes gears periodically from one style of teaching to another.”

I rated the instructor as follows:

Outstanding:  changes gears frequently to accommodate the 6-minute attention span

Satisfactory:   changes gears more than three times during the class session

Somewhat:   changes gears for one or two times during the class session

Not at all:  use only one style from beginning to the end

“The instructor engages students periodically through think/pair share, problem solving, or other active learning exercises. “

I rated the instructor as follows:

Outstanding:  have more than one type of active learning exercises, or active learning exercises that involve most of the students in and help long-term memory storage

Satisfactory:   do at least one active learning exercise that many students participate

Somewhat:   attempt to do active learning exercises but receive few responses

Not at all:  never initiate any active learning exercises

“The instructor uses guided notes.”

I rated the instructor as follows:

Outstanding:  clear organized guided notes that most students know how to fill

Satisfactory:   visual aids in class show the format of visual aids

Somewhat:   has information to be note down other than provided notes

Not at all:  never use any guided notes

“Students maintain attention toward the instructor (for example – eye contact).”

I rated the students as follows:

None: no one has any behaviors of paying attention to the instructor , including making eye contact, heading up and facing forward, responding to humor, etc.

Few: less than 10 percent of the students have behaviors of paying attention

Some: from 10 percent to 50 percent of the students show such behaviors

Many: from 50 percent to 75 percent of the students show such behaviors

Most: more than 75 percent of the students show such behaviors

“Students remain awake and alert during the observed session.”

I rated the students as follows:

None: every student in the classroom fall in sleep for at least a moment

Few: less than 10 percent of the students don’t fall in sleep at all and respond to major events in the lecture

Some: from 10 percent to 50 percent of the students don’t fall in sleep from beginning to the end

Many: from 50 percent to 75 percent of the students never fall in sleep

Most: more than 75 percent of the students never fall in sleep

“Students are using their cell phones or other electronic devices in activities unrelated to class. “

I rated the students as follows:

None: no student in the classroom look at the cell phone screen or do any operations when not asked to do or the course content don’t need information on cell phone to understand

Few: less than 10 percent of the students use cell phone for unrelated activities at least once

Some: from 10 percent to 50 percent of the students use cell phone for unrelated activities

Many: from 50 percent to 75 percent of the students use cell phone for unrelated activities

Most: more than 75 percent of the students use cell phone for unrelated activities

“Students are over one minute late to class. ”

I rated the students as follows:

None: no student enter the classroom after one minute into the class

Few: less than 10 percent of the students are more than one minute late

Some: from 10 percent to 50 percent of the students are more than one minute late

Many: from 50 percent to 75 percent of the students are more than one minute late

Most: more than 75 percent of the students are more than one minute late

“Students pack up early at the end of class. ”

I rated the students as follows:

None: no student pack up their belongings before the class ends

Few: less than 10 percent of the students pack up early

Some: from 10 percent to 50 percent of the students pack up early

Many: from 50 percent to 75 percent of the students pack up early

Most: more than 75 percent of the students pack up early

“Students are reading the newspaper or doing other non-electronic activities unrelated to class. “

I rated the students as follows:

None: no student in the classroom read newspaper or do other non-electronic activities unrelated to class other than sleeping

Few: less than 10 percent of the students do unrelated non-electronic activities

Some: from 10 percent to 50 percent of the students do unrelated non-electronic activities

Many: from 50 percent to 75 percent of the students do unrelated non-electronic activities

Most: more than 75 percent of the students do unrelated non-electronic activities