Dear Professor Kartik Mohanram:

Student Opinion of Teaching Questionnaire Results

This form contains evaluation results for COMPUTR ORGZTN & ASSMBLY LANG(COE-0147)-1030.

Attached is a report in PDF format containing your Student Opinion of Teaching Survey results from last term. The report is best viewed and/or printed in color.

The evaluation results are broken down into three distinct categories. The first part of the report shows a breakdown of student responses to the quantitative questions. For each item, the number of students (n) who responded, the average or mean (av.) and standard deviation (dev.) are displayed next to a chart or histogram that shows the percentage of the class who responded to each option for that question. The percentages are above the number on the rating scale which increases from left to right, i.e. the number 1 equals the least favorable rating and the number 5 equals the most favorable rating. The sum of percentages will equal 100%. A red mark is displayed on the chart where the average or mean is located. To calculate how many students responded to each option, multiply the number of students who answered the question by the percentage for that option. For example, if 14 students answered the question and 50% responded to option 3 then 7 students marked option 3 for that item (14 x .50 = 7). The standard deviation is a common measure of dispersion around the mean that may be useful in interpreting the results.

If your school had previously calculated norms, they will be on OMET’s website (omet.pitt.edu).

The second part displays individual comments to each question in the open-ended section of the evaluation. All the responses to the first question will be listed together after the first question and then the responses to the next question will be listed together after the next question, and so on.

The final part gives you a profile of the student responses to the quantitative section of the evaluation. This is a chart listing all of the means for the scaled items with a dashed red line connecting the means.

If the number of respondents for any of the scaled items is fewer than seven, please be cautious in interpreting the quantitative results.

Office of Measurement and Evaluation of Teaching (OMET)
1. SELF RATINGS

1.1) Compared to other courses at the same level, the amount of work I did was:

- Much more
- Much less

n=12
av.=3.5
dev.=0.52

1.2) In this course I have learned:

- Much more
- Much less

n=12
av.=4
dev.=1.13

1.3) The grade I expect in this course is:

- A
- B
- C
- D
- F
- Other

n=12

2. TEACHING EVALUATION

2.1) The instructor presented the course in an organized manner.

- Hardly at all
- To a very high degree

n=12
av.=4.67
dev.=0.65

2.2) The instructor stimulated my thinking.

- Hardly at all
- To a very high degree

n=12
av.=4.42
dev.=0.67

2.3) The instructor evaluated my work fairly.

- Hardly at all
- To a very high degree

n=12
av.=4.5
dev.=0.9

2.4) The instructor made good use of examples to clarify concepts.

- Hardly at all
- To a very high degree

n=12
av.=4.17
dev.=1.03

2.5) The instructor maintained a good learning environment.

- Hardly at all
- To a very high degree

n=12
av.=4.58
dev.=0.51

2.6) The instructor was accessible to students. (Do not answer if no basis to judge)

- Hardly at all
- To a very high degree

n=6
av.=4.84
dev.=0.84
2.7) Express your judgment of the instructor’s overall teaching effectiveness:

Ineffective 0% 0% 30% 30% 40% Excellent  n=10
 av.=4.1
 dev.=0.88

2.8) Would you recommend this course to other students?

<table>
<thead>
<tr>
<th>Definitely not</th>
<th>16.7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probably not</td>
<td>8.3%</td>
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<tr>
<td>Probably yes</td>
<td>25%</td>
</tr>
<tr>
<td>Definitely yes</td>
<td>50%</td>
</tr>
</tbody>
</table>

n=12

av.=2.5
dev.=0.8

2.9) Would you recommend this instructor to other students?

<table>
<thead>
<tr>
<th>Probably not</th>
<th>8.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probably yes</td>
<td>16.7%</td>
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<tr>
<td>Definitely yes</td>
<td>75%</td>
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</tbody>
</table>

n=12

av.=2.5
dev.=0.8

3. SWANSON SCHOOL OF ENGINEERING ADDITIONAL ITEMS- select only one answer for each item

3.1) ability to use math concepts to solve engineering problems.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>25%</th>
<th>A great deal</th>
<th>41.7%</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
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<td>6</td>
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<td>16.7%</td>
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</tr>
</tbody>
</table>

n=12
av.=2.42
dev.=1.38

3.2) ability to use chemistry concepts to solve engineering problems.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>100%</th>
<th>A great deal</th>
<th>0%</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
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<tr>
<td>6</td>
<td>0</td>
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</table>

n=12
av.=1
dev.=0

3.3) ability to use physics concepts to help solve engineering problems.

| Not at all | 75% | A great deal | 16.7% | 0% |
|------------|-----|--------------|-------|
| 1          | 2   | 3            | 4     |
| 5          | 0   | 8.3%         | 0     |
| 6          | 0   | 8.3%         | 0     |

n=12
av.=1.42
dev.=0.9

3.4) ability to use engineering concepts to help solve problems.

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<th>0%</th>
<th>A great deal</th>
<th>33%</th>
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<td>8.3%</td>
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n=12
av.=3.58
dev.=1.31

3.5) ability to design an experiment to obtain measurements or gain additional knowledge about a process.

<table>
<thead>
<tr>
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<th>41.7%</th>
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<th>0%</th>
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<tbody>
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<td>16.7%</td>
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n=12
av.=3
dev.=1.86

3.6) ability to analyze and interpret engineering data.

<table>
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<th>A great deal</th>
<th>25%</th>
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n=12
av.=3.8
dev.=1.45

3.7) ability to design a device or process to meet a stated need.

<table>
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<th>8.3%</th>
<th>A great deal</th>
<th>8.3%</th>
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n=12
av.=4.08
dev.=1.38

05/05/2014
Class Climate evaluation Page 2
3.8) ability to function effectively in different team roles.

Not at all | A great deal
---|---

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<td>8.3%</td>
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n=12

3.9) ability to formulate and solve engineering problems.

Not at all | A great deal
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n=12

av.=3.58

dev.=1

3.10) ability to use laboratory procedures and equipment.

Not at all | A great deal
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n=12

av.=1.58

dev.=1.38

3.11) ability to use software packages to solve engineering problems.

Not at all | A great deal
---|---

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n=12

av.=4.28

dev.=0.79

3.12) ability to use CAD software.

Not at all | A great deal
---|---

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n=12

av.=2.58

dev.=1.83

3.13) knowledge of professional and ethical responsibility.

Not at all | A great deal
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n=12

av.=2.25

dev.=1.76

3.14) ability to write reports effectively.

Not at all | A great deal
---|---

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<td>5</td>
<td>1.37</td>
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n=12

av.=1

dev.=0

3.15) ability to make effective oral presentations.

Not at all | A great deal
---|---

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<td>0%</td>
<td>5</td>
<td>1.37</td>
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</tbody>
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n=12

av.=1

dev.=0

3.16) knowledge about the potential risks (to the public) and impacts that an engineering solution or design may have.

Not at all | A great deal
---|---

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<th>Standard Deviation</th>
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<td>4</td>
<td>8.3%</td>
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<td>1.37</td>
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</table>

n=12

av.=2.17

dev.=1.53

3.17) ability to apply knowledge about current issues (economic/environmental/political/societal/etc.) to engineering-related problems.

Not at all | A great deal
---|---

<table>
<thead>
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<th>Count</th>
<th>Average</th>
<th>Standard Deviation</th>
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<tr>
<td>4</td>
<td>0%</td>
<td>5</td>
<td>1.37</td>
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</tbody>
</table>

n=12

av.=2.17

dev.=1.34

3.18) appreciation of the need to engage in life-long learning.

Not at all | A great deal
---|---

<table>
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<tr>
<th>Response</th>
<th>Count</th>
<th>Average</th>
<th>Standard Deviation</th>
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<tr>
<td>4</td>
<td>25%</td>
<td>5</td>
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</tbody>
</table>

n=12

av.=3.25

dev.=1.54

4. TEACHING COMMENTS

4.1) What were the instructor’s major strengths?

- Great teacher who cares about his students learning. Fair grader, but a challenging course with difficult exams and assignments.
- Had good amount of knowledge about the material
He was very enthusiastic and gave interesting background information that made what we were doing seem more relevant. Very good on going between the big picture and minute implementation details.

Professor Mohanram was prepared for every lecture and presented the information in a very engaging way. He even compiled all the lecture content into PDFs for us to ensure we had easy access to anything we may have missed. A few weeks in, he asked us for suggestions on how to improve the course. Really, Prof. Mohanram is the most engaged teacher I've encountered at Pitt. He very clearly cares about the success of his students.

Very effective in the way he teaches the material. Very easy to understand and learn from. Makes good use of examples and assignments to help students truly understand the concepts and ideas presented.

Very intelligent professor who knows how to relate complicated information to his students easily.

Very organized and asked for student input

fluid lectures

presents material in extremely organized fashion

very knowledgeable about the computer industry. Always willing to explain a problem another way if needed to.

What were the instructor's major weaknesses?

Did not clarify with examples in class with assembly language; made assembly very abstract, difficult to grasp effectively.

He has to teach very boring material

I'm not sure the lectures are set up well. They tend to put some people to sleep. I definitely learn in the lectures, but I believe the way it is set up makes it difficult to pay attention some times.

None really.

None.

Sometimes he talked too fast. Sometimes he got off on a long tangent but often those were interesting.

lab assignments felt substantially more difficult than examples we worked through in class

n/a

5. COURSE COMMENTS

What aspects of this course were most beneficial to you?

All of it.

Assembly language helped me understand a lot about the way processing works.

Assignments and exams really helped reinforce major concepts.

Learning MIPS

N/a.

Nothing stands out

The Labs and assignments.

The problem solving. I had to struggle with the programming but I always ended up getting it to work. It was rewarding.

all of it

outlines provided at beginning of class (on board) supplemental presentations & materials uploaded to course site recitation labs helpful in clarifying topics from class
2) What suggestions do you have to improve the course?

- During lecture write small assembly codes in MIPS and just step through the code. It would help with visually learning the material in my opinion.
- It was great.
- Material is presented in a weird order, the computer organization overview should come first (how to implement a basic processor) then dive into programming with assembly language. As a computer engineering student, I feel that understanding the fundamental design of computers is more important than learning assembly language. I realize that this is based on a CS course, but maybe it should be more heavily altered to better fit COE.
- More interactive Reteaching in regards to learning program rather than a lecture. That is, it should be structured more like ENGR 0011 and ENGR 0012.
- Remove the assembly language portion
- The difficulty spike of this course compared to 0132 (Digital Logic) is dramatic, and surprising at first.
- it was pretty good
- n/a
**Profile**

**Subunit:** ENGINEERING-ELECTRICAL & COMPUTER  
**Name of the instructor:** Professor Kartik Mohanram,  
**Name of the course:** COMPUTR ORGZTN & ASSEMBLY LANG(COE-0147)-1030

Values used in the profile line: Mean

### 1. SELF RATINGS

- **1.1) Compared to other courses at the same level, the amount of work I did was:**  
  - Much less  
  - Much more  
  - **n=12 av.=3.50 md=3.50 dev.=0.52**

- **1.2) In this course I have learned:**  
  - Much less  
  - Much more  
  - **n=12 av.=4.00 md=4.50 dev.=1.13**

### 2. TEACHING EVALUATION

- **2.1) The instructor presented the course in an organized manner.**  
  - Hardly at all  
  - To a very high degree  
  - **n=12 av.=4.67 md=5.00 dev.=0.65**

- **2.2) The instructor stimulated my thinking.**  
  - Hardly at all  
  - To a very high degree  
  - **n=12 av.=4.42 md=4.50 dev.=0.67**

- **2.3) The instructor evaluated my work fairly.**  
  - Hardly at all  
  - To a very high degree  
  - **n=12 av.=4.50 md=5.00 dev.=0.90**

- **2.4) The instructor made good use of examples to clarify concepts.**  
  - Hardly at all  
  - To a very high degree  
  - **n=12 av.=4.17 md=4.50 dev.=1.03**

- **2.5) The instructor maintained a good learning environment.**  
  - Hardly at all  
  - To a very high degree  
  - **n=12 av.=4.58 md=5.00 dev.=0.51**

- **2.6) The instructor was accessible to students.**  
  - Hardly at all  
  - To a very high degree  
  - **n=6 av.=4.50 md=5.00 dev.=0.84**

- **2.7) Express your judgment of the instructor's overall teaching effectiveness:**  
  - Ineffective  
  - Excellent  
  - **n=10 av.=4.10 md=4.00 dev.=0.88**

### 3. SWANSON SCHOOL OF ENGINEERING ADDITIONAL ITEMS- select only one answer for each item

- **3.1) ability to use math concepts to solve engineering problems.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=2.42 md=2.00 dev.=1.38**

- **3.2) ability to use chemistry concepts to solve engineering problems.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=1.00 md=1.00 dev=.00**

- **3.3) ability to use physics concepts to help solve engineering problems.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=1.42 md=1.00 dev=.90**

- **3.4) ability to use engineering concepts to help solve problems.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=3.58 md=4.00 dev=.131**

- **3.5) ability to design an experiment to obtain measurements or gain additional knowledge about a process.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=3.00 md=3.50 dev=1.86**

- **3.6) ability to analyze and interpret engineering data.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=3.50 md=4.00 dev=1.45**

- **3.7) ability to design a device or process to meet a stated need.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=4.08 md=5.00 dev=1.38**

- **3.8) ability to function effectively in different team roles.**  
  - Not at all  
  - A great deal  
  - **n=12 av.=1.67 md=1.00 dev=1.37**
3.9) ability to formulate and solve engineering problems.

Not at all | A great deal
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n=12  av.=3.58  md=3.00  dev.=1.00

3.10) ability to use laboratory procedures and equipment.

Not at all | A great deal
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n=12  av.=1.58  md=1.00  dev.=1.38

3.11) ability to use software packages to solve engineering problems.

Not at all | A great deal
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n=12  av.=4.58  md=5.00  dev.=0.79

3.12) ability to use CAD software.

Not at all | A great deal
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n=12  av.=2.58  md=1.50  dev.=1.83

3.13) knowledge of professional and ethical responsibility.

Not at all | A great deal
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n=12  av.=2.25  md=1.00  dev.=1.76

3.14) ability to write reports effectively.

Not at all | A great deal
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n=12  av.=1.00  md=1.00  dev.=0.00

3.15) ability to make effective oral presentations.

Not at all | A great deal
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n=12  av.=1.00  md=1.00  dev.=0.00

3.16) knowledge about the potential risks (to the public) and impacts that an engineering solution or design may have.

Not at all | A great deal
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n=12  av.=2.17  md=1.00  dev.=1.53

3.17) ability to apply knowledge about current issues (economic/environmental/political/societal/etc.) to engineering-related problems.

Not at all | A great deal
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n=12  av.=2.17  md=1.50  dev.=1.34

3.18) appreciation of the need to engage in life-long learning.

Not at all | A great deal
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n=12  av.=3.25  md=3.50  dev.=1.54