**THE COURSE**

Q1: Textbook/supplementary material in support of the course.
Q2: Value of assigned homework in support of the course topics.
Q3: Value of laboratory experiments/projects in support of the course topics.
Q4: Reasonableness of exams and quizzes in covering course material.
Q5: Weight given to labs or projects, relative to exams and quizzes.
Q6: Weight given to homework assignments, relative to exams and quizzes.
Q7: Definition and application of criteria for grading.

<table>
<thead>
<tr>
<th>Scale</th>
<th>VG</th>
<th>G</th>
<th>F</th>
<th>NA</th>
<th>Mean</th>
<th>C.V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Freq: Perc</td>
<td>13%</td>
<td>47%</td>
<td>27%</td>
<td>13%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Q2 Freq: Perc</td>
<td>47%</td>
<td>6%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Q3 Freq: Perc</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>13%</td>
<td>0%</td>
</tr>
<tr>
<td>Q4 Freq: Perc</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>93%</td>
</tr>
<tr>
<td>Q5 Freq: Perc</td>
<td>40%</td>
<td>6%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Q6 Freq: Perc</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>Q7 Freq: Perc</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Averages: 33% 26% 13% 3% 25% 4.39
## THE INSTRUCTOR

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8</td>
<td>The instructor was well prepared.</td>
<td></td>
</tr>
<tr>
<td>Q9</td>
<td>The instructor communicated ideas clearly.</td>
<td></td>
</tr>
<tr>
<td>Q10</td>
<td>The instructor or assistants were available for outside assistance.</td>
<td></td>
</tr>
<tr>
<td>Q11</td>
<td>The instructor exhibited enthusiasm for and interest in the subject.</td>
<td></td>
</tr>
<tr>
<td>Q12</td>
<td>The instructor’s approach stimulated student thinking.</td>
<td></td>
</tr>
<tr>
<td>Q13</td>
<td>The instructor related course material to its application.</td>
<td></td>
</tr>
<tr>
<td>Q14</td>
<td>The instructor’s methods of presentation supported student learning.</td>
<td></td>
</tr>
<tr>
<td>Q15</td>
<td>The instructor’s grading was fair, impartial, and adequate.</td>
<td></td>
</tr>
<tr>
<td>Q16</td>
<td>The instructor returned graded materials within a reasonable time period.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Mean</th>
<th>C.V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.73</td>
<td>0.10</td>
</tr>
<tr>
<td>Q9</td>
<td>11</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4.67</td>
<td>0.13</td>
</tr>
<tr>
<td>Q10</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4.27</td>
<td>0.21</td>
</tr>
<tr>
<td>Q11</td>
<td>47</td>
<td>40</td>
<td>7</td>
<td>7</td>
<td>0</td>
<td>4.93</td>
<td>0.05</td>
</tr>
<tr>
<td>Q12</td>
<td>93</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4.47</td>
<td>0.14</td>
</tr>
<tr>
<td>Q13</td>
<td>5</td>
<td>40</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>4.20</td>
<td>0.18</td>
</tr>
<tr>
<td>Q14</td>
<td>33</td>
<td>60</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>4.40</td>
<td>0.17</td>
</tr>
<tr>
<td>Q15</td>
<td>3</td>
<td>33</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>4.87</td>
<td>0.07</td>
</tr>
<tr>
<td>Q16</td>
<td>87</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4.73</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Averages: 65%  30%  4%  1%  0%  4.59
**Analysis of Classroom Evaluations**

**CO  L  L  E  G  E  o  f  E  N  G  I  N  E  E  R  I  N  G**

**EEE 454A**  
Credit Hours: 3  
Enrollment: 25  
18855  
Number of Respondents: 15  
DOUGLAS COCHRAN  
FA90

---

**OVERALL**

---

**Q17:** Overall quality of the course and instruction.  
**Q18:** How do you rate yourself as a student in this course?

<table>
<thead>
<tr>
<th></th>
<th>EX</th>
<th>VG</th>
<th>G</th>
<th>F</th>
<th>PO</th>
<th>Mean</th>
<th>C.V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perc</td>
<td>6%</td>
<td>6%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>4.13</td>
<td>0.22</td>
</tr>
</tbody>
</table>

|     | 7% | 33%| 53%| 7%| 0% |       |      |
| Perc| 40%| 40%| 13%| 7%| 0% |       |      |

**Q19:** Is this a required course in your program of study?  
Yes  
No  
27%  
73%

**Q20:** What are the average hours/week spent studying for this course?

|     | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100|
|-----|----|----|---|---|----|------|------|
| Freq| 20%| 53%| 20%| 7%| 0% |       |      |
| Perc|   3|     |     |     |     |       |      |

**Q21:** What is your class standing?

<table>
<thead>
<tr>
<th></th>
<th>FR</th>
<th>SO</th>
<th>JR</th>
<th>SR</th>
<th>GR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Perc</td>
<td>0%</td>
<td>0%</td>
<td>7%</td>
<td>87%</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

**Q22:** What % of the class meetings have you attended?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freq</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

| Perc| 100%| 0%| 0%| 0%| 0%| 0%| 0%| 0%| 0%| 0%| 100% |

---
Analysis of Classroom Evaluations

COLLEGE OF ENGINEERING

EEE 591K
Credit Hours: 3
Enrollment: 16

19274
Number of Respondents: 13

DOUGLAS COCHRAN
FA90

VG - Very Good; G - Good;
P - Fair; P - Poor; NA - Not Applicable

THE COURSE

Q1: Textbook/supplementary material in support of the course.
Q2: Value of assigned homework in support of the course topics.
Q3: Value of laboratory experiments/projects in support of the course topics.
Q4: Reasonableness of exams and quizzes in covering course material.
Q5: Weight given to labs or projects, relative to exams and quizzes.
Q6: Weight given to homework assignments, relative to exams and quizzes.
Q7: Definition and application of criteria for grading.

<table>
<thead>
<tr>
<th>Scale</th>
<th>VG</th>
<th>6</th>
<th>3</th>
<th>2</th>
<th>NA</th>
<th>Mean</th>
<th>C.V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Freq:</td>
<td>5%</td>
<td>3%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>4.00</td>
<td>0.23</td>
</tr>
<tr>
<td>Q2 Freq:</td>
<td>9%</td>
<td>4%</td>
<td>31%</td>
<td>0%</td>
<td>0%</td>
<td>4.69</td>
<td>0.10</td>
</tr>
<tr>
<td>Q3 Freq:</td>
<td>0%</td>
<td>4%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Q4 Freq:</td>
<td>9%</td>
<td>4%</td>
<td>31%</td>
<td>0%</td>
<td>0%</td>
<td>4.69</td>
<td>0.10</td>
</tr>
<tr>
<td>Q5 Freq:</td>
<td>2%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>58%</td>
<td>4.40</td>
<td>0.12</td>
</tr>
<tr>
<td>Q6 Freq:</td>
<td>8%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>4.62</td>
<td>0.11</td>
</tr>
<tr>
<td>Q7 Freq:</td>
<td>47%</td>
<td>38%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>4.77</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Averages: 47% 30% 5% 0% 17% 4.45
Analysis of Classroom Evaluations

C O L L E G E  o f  E N G I N E E R I N G

EEE 591K
Credit Hours: 3
Enrollment: 16

19274
Number of Respondents: 13

DOUGLAS COCHRAN
FA90

A - Almost Always; B - Usually
C - 50% of time; D - Occasionally
E - Almost Never

THE INSTRUCTOR

Q8: The instructor was well prepared.
Q9: The instructor communicated ideas clearly.
Q10: The instructor or assistants were available for outside assistance.
Q11: The instructor exhibited enthusiasm for and interest in the subject.
Q12: The instructor's approach stimulated student thinking.
Q13: The instructor related course material to its application.
Q14: The instructor's methods of presentation supported student learning.
Q15: The instructor's grading was fair, impartial, and adequate.
Q16: The instructor returned graded materials within a reasonable time period.

Scale

<table>
<thead>
<tr>
<th>Q8</th>
<th>Q9</th>
<th>Q10</th>
<th>Q11</th>
<th>Q12</th>
<th>Q13</th>
<th>Q14</th>
<th>Q15</th>
<th>Q16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freq</td>
<td>Perc</td>
<td>Freq</td>
<td>Perc</td>
<td>Freq</td>
<td>Perc</td>
<td>Freq</td>
<td>Perc</td>
<td>Freq</td>
</tr>
<tr>
<td>12</td>
<td>92%</td>
<td>42</td>
<td>92%</td>
<td>7</td>
<td>54%</td>
<td>13</td>
<td>100%</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>8%</td>
<td>1</td>
<td>8%</td>
<td>6</td>
<td>46%</td>
<td>0</td>
<td>0%</td>
<td>5</td>
</tr>
<tr>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>C.V.</td>
<td>4.92</td>
<td>0.06</td>
<td>4.92</td>
<td>0.06</td>
<td>5.00</td>
<td>0.00</td>
<td>4.62</td>
</tr>
</tbody>
</table>

Averages

| 78% | 22% | 0% | 0% | 0% | 4.78 |
OVERALL

Q17: Overall quality of the course and instruction.
Q18: How do you rate yourself as a student in this course?

Q17 Freq: EX 11
          VG 2
          G  0
          F  0
          P  0
          Mean 4.85
          C.V. 0.08

Q18 Freq: 85%
          15%
          0%
          0%
          0%
          0%
          Perc: 85%
          15%
          0%
          0%
          0%
          0%
          C.V. 0.09

Q19: Is this a required course in your program of study? Yes 69%
              No 31%

Q20: What are the average hours/week spent studying for this course?

Q20 Freq: 16
          8
          4
          2
          1
          0
          Perc: 0%
          46%
          54%
          0%
          0%

Q21: What is your class standing?

Q21 Freq: FR 0
          SO 0
          JR 0
          SR 1
          GR 12
          Perc: 0%
          0%
          0%
          8%
          92%

Q22: What % of the class meetings have you attended?

Q22 Freq: 90-
          100-
          70-
          89-
          50-
          69-
          30-
          49-
          10-
          29-
          Perc: 13%
          100%
          0%
          0%
          0%
          0%
          0%
          0%
          0%
          0%
26. What did you like most about this course?
Dr. Cochran is the best engineering instructor that I have had at ASU or my previous school.

27. What did you like least about this course?
The book was definitely intended towards graduate students and was difficult to deal with.
26. What did you like most about this course?

The instructor. He was very well prepared and clear on the subject. He was always available outside class for additional help. He made it very clear what was required.

27. What did you like least about this course?

The book. The book was not very clear.
26. What did you like most about this course?

The application of probability to detectors.

27. What did you like least about this course?

The book. Dr. Cochrane should have written his own book since most of the material I have learned has come from his lecture notes.
26. What did you like most about this course?

Doug related the material to its applications. Doug, in my opinion, is an asset to the ASU EE department!

27. What did you like least about this course?

Need more problems to work with available solutions. The examples in the book are tough to follow.
26. What did you like most about this course?

Having seen much of the material before and not having understood it nearly as well as I liked the way the instructor presented the material in a clear understandable fashion.

27. What did you like least about this course?

Dr. Cochran is one of the finest lecturers I have encountered. Don't let him get away from teaching.
26. What did you like most about this course?

The instructor teaching and way of communicating.

27. What did you like least about this course?

Not applicable.
26. What did you like most about this course?

The fact that the instructor didn't rage you as far as tests go if you made a stupid mistake - very few and good partial credit given.

27. What did you like least about this course?

T-Th classes are too long.
26. What did you like most about this course?

Clarity, ease.

27. What did you like least about this course?

Progress a bit slow.
26. What did you like most about this course?

The instructor was very good. He related the material well.

27. What did you like least about this course?
26. What did you like most about this course?

Instructor was good & has an interesting sense of humor

27. What did you like least about this course?

The book makes the material seem much more complicated.
26. What did you like most about this course?

The lectures, homework

27. What did you like least about this course?

The textbook does not have enough material
26. What did you like most about this course?

D. Cochran took a boring class and made it bearable through awesome teaching and a good sense of humor.

27. What did you like least about this course?
26. What did you like most about this course?

Instructor was very competent
Interesting and fair

27. What did you like least about this course?

Solutions manual not available
It's nice to have solutions to unassigned HW to use while studying. Problems are fresh in your mind, rather than going to instructor next day
26. What did you like most about this course?

Instructor was very good. Friday was fun.

27. What did you like least about this course?

Grades for the homework did not reflect over and problems well enough.
26. What did you like most about this course?

The lectures were very good.

27. What did you like least about this course?

The book was hard to understand in places.
WRITE-IN AREA 1  
26. What did you like most about this course?
The Instructor.

WRITE-IN AREA 2  
27. What did you like least about this course?
Book

WRITE-IN AREA 3

FOR OFFICE USE ONLY

1 A B C D E
2 A B C D E
3 A B C D E
26. What did you like most about this course?

The air of familiarity with the course material.

27. What did you like least about this course?

The weight of the homework assignment.
26. What did you like most about this course?

A understanding of probabilities (somewhat)

27. What did you like least about this course?

The books sucked -
could not get any positive feedback while doing homework.
Instructor office hours too late in afternoon.
26. What did you like **most** about this course?

The course was well organized and I was motivated to learn the material.

27. What did you like **least** about this course?