

STA 216 03
Intermediate Applied Stats
Course type: Face-to-Face

Taught by: Bradford Dykes

Instructor Evaluated: Bradford Dykes-Assist Prof

Evaluation Delivery: Online
Evaluation Form: A3
Responses: 18/22 (82% very high)

Overall Summative Rating represents the combined responses of students to the four global summative items and is presented to provide an overall index of the class's quality:

Combined Median	Adjusted Combined Median
3.8	4.2
(0=lowest; 5=highest)	

Challenge and Engagement Index (CEI) combines student responses to several *IASystem* items relating to how academically challenging students found the course to be and how engaged they were:

CEI: 5.0
(1=lowest; 7=highest)

SUMMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Adjusted Median
The course as a whole was:	18	28%	44%	11%	17%			4.0	4.5
The course content was:	18	28%	33%	33%	6%			3.8	4.2
The instructor's contribution to the course was:	18	28%	39%	17%	11%	6%		3.9	4.4
The instructor's effectiveness in teaching the subject matter was:	18	22%	17%	44%		11%	6%	3.2	3.8

STUDENT ENGAGEMENT

Relative to other college courses you have taken:	N	Much Higher (7)	(6)	(5)	Average (4)	(3)	(2)	Much Lower (1)	Median
Do you expect your grade in this course to be:	18		17%	11%	56%	6%	11%		4.1
The intellectual challenge presented was:	18	22%	28%	33%	17%				5.5
The amount of effort you put into this course was:	18	22%	22%	44%	6%	6%			5.4
The amount of effort to succeed in this course was:	18	22%	33%	28%	11%	6%			5.7
Your involvement in course (doing assignments, attending classes, etc.) was:	18	22%	28%	39%	11%				5.5

On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?

Class median: 5.1 Hours per credit: 1.7 (N=18)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
		61%	28%	11%							

From the total average hours above, how many do you consider were valuable in advancing your education?

Class median: 4.6 Hours per credit: 1.5 (N=18)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
	17%	61%	6%	17%							

What grade do you expect in this course?

Class median: 3.3 (N=18)

A (3.9-4.0)	A- (3.5-3.8)	B+ (3.2-3.4)	B (2.9-3.1)	B- (2.5-2.8)	C+ (2.2-2.4)	C (1.9-2.1)	C- (1.5-1.8)	D+ (1.2-1.4)	D (0.9-1.1)	D- (0.7-0.8)	E (0.0)	Pass	Credit	No Credit
6%	28%	28%	28%		6%		6%							

In regard to your academic program, is this course best described as:

(N=18)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
50%	6%	6%	22%	17%	

STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Relative Rank
Course organization was:	18	39%	33%	11%	11%	6%		4.2	3
Explanations by instructor were:	18	17%	33%	28%	6%	6%	11%	3.5	16
Instructor's ability to present alternative explanations when needed was:	18	17%	44%	17%	17%	6%		3.8	13
Instructor's use of examples and illustrations was:	18	39%	22%	22%	11%	6%		4.0	12
Quality of questions or problems raised by the instructor was:	18	39%	22%	33%	6%			4.0	10
Student confidence in instructor's knowledge was:	18	56%	39%		6%			4.6	4
Instructor's enthusiasm was:	18	61%	28%		11%			4.7	2
Encouragement given students to express themselves was:	18	50%	6%	39%	6%			4.5	5
Answers to student questions were:	18	17%	39%	22%	17%	6%		3.6	17
Availability of extra help when needed was:	18	33%	28%	33%	6%			3.9	15
Use of class time was:	18	44%	22%	22%	11%			4.2	6
Instructor's interest in whether students learned was:	18	39%	39%	11%	6%	6%		4.2	9
Amount you learned in the course was:	18	17%	44%	28%	6%	6%		3.8	14
Relevance and usefulness of course content were:	18	39%	39%	17%		6%		4.2	7
Evaluative and grading techniques (tests, papers, projects, etc.) were:	18	33%	28%	17%	17%	6%		3.9	11
Reasonableness of assigned work was:	17	35%	35%	24%		6%		4.1	8
Clarity of student responsibilities and requirements was:	18	50%	22%	17%	11%			4.5	1

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STANDARD OPEN-ENDED QUESTIONS

Was this class intellectually stimulating? Did it stretch your thinking? Why or why not?

1. Yes, I didn't expect the amount of SAS coding, going into the course, but I understand that it is necessary to progress in the subject. Thinking about how to represent the information we have with SAS code definitely improved my understanding of the concepts we dealt with, as well as the reasoning behind the code we used.
2. It was intellectually stimulating, but the concepts were very hard to understand.
3. It was a good extension of STA 215 and showed the applicability of statistics.
4. Yes, it was a very difficult class that required me to think and study in a different way.
5. Yes, I needed to read and pay attention a lot to keep myself up with everyone
6. The content of the course is applicable and relevant.
7. It stretched my thinking in relation to data and how it can be presented. Looking at what best fits a model is interesting.
8. This class was interesting because the TBL style was very useful
9. This statistics course delves into the language of statistics more than a previous class very similar to this one. Although the content between the two courses was relatively similar, understanding the language being used was the most difficult part of the course.
10. Yes, because it was difficult to try to learn the material without a traditional lecture.
11. Yes. The group assignments in class allowed for great problem solving and evaluation of the content that one knows.
12. This class had many new concepts, as well as previously learned concepts, that were presented in a variety of ways. It wasn't exceedingly difficult, but it did offer a challenge. Critical thinking skills proved to be very important.
13. Yes. This course helped myself gain insight into statistical modeling. Also the SAS portion of the class helped the students help gain experience in coding and statistic programs.
14. Yes, it forced me to communicate my ideas to my group, along with analyzing their answers.
15. Yes, I had to think about how some set of data applied to answering questions.
16. This class was very intellectually stimulating, it really tested my brain with concepts and at first I struggled to grasp it but as time went on it clicked and really helped.
17. No

What aspects of this class contributed most to your learning?

1. The team based learning format made approaching the content much more comfortable, as we could rely on teammates to assist with understanding the material.
2. The group work was very helpful to my learning.
3. Team Based Learning
4. Talking to my team mates and working through problems with them outside of the classroom.
5. The TAPs and Homework
6. The class organization was very good.
7. Working outside of class on homework with my team really helped me learn.
8. The in class examples
9. The "Team-Based Learning" contributed the most. It was a new experience for me, but I greatly appreciated the collaboration aspects involved in learning new material.
10. Clarification when there was confusion.
11. The LM assignments
12. The readings and group activities, as well as homework, contributed the most to learning information.
13. The team based learning provided the opportunity to collaborate and work through difficult problems.
14. The team based learning activities were always interactive and engaging.
15. I think that the homework assignments helped the most with my learning.
16. I feel the TBL style learning was beneficial for me because it gives you a group of people in the class you can rely on for help and support if needed.

What aspects of this class detracted from your learning?

2. The lack of lecture was detracting from my learning.
3. unclear SAS learning
4. The entire way the class was structured. I understand a flipped classroom for certain courses, but for something like statistics, students need instruction. I felt like I was doing self-study this entire semester and I struggle to learn like that.
5. The SAS
6. The course as a system seemed overly complicated.
7. When required to read the text outside of class, I often found it difficult to understand the topics and it requires a lot of effort to understand the material before coming to class. If you don't understand the readings, the class period is almost a waste of time.
8. Nothing really. Maybe the clarity of what we were to read for the RAT's
9. Often the professor's use of examples confused me more. There was a lack of explaining concepts in a simple manner; what I mean is only using statistical language to explain concepts. Although this is perfectly fine, for me I learn best when something is worded in a multitude of ways.
10. Not having traditional lecture.
11. Not having great explanations of topics due to the amount of group work.
12. The flipped classroom/TBL system was confusing to get used to at first, and being that this was the first time in this kind of environment for many of us, progress was slower.
13. I felt sometimes during TAPS, there was down time that could have been used to have more extensive mini-lectures. I feel the lectures would be extremely helpful in explaining concepts.
14. Nothing really detracted, but the homework often felt superfluous.
15. The Team Based Learning was kind of hard for me to grasp a handle on. I felt like the lectures were too spur of the moment, with virtually nothing written down by the professors, and the mini lectures were too fast.
16. I really am not sure, I was always pretty into the class setting.

What suggestions do you have for improving the class?

2. Maybe add some more lecture to the course and group work.
3. rewrite the way SAS code is taught
4. Maybe have the teacher spend a few minutes at the start of class doing an example problems, so students can see what they're supposed to be doing?
5. Focus on interpretation of SAS output rather than actually coding
6. Less time on how the course works and more about real material.
7. Keep the TBL teams. I love them.
8. don't be so picky about homework answers. He takes off a lot of points for very very minor things that he directly tells us in class, and then marks them as wrong
9. Be more clear about requirements on assignments because at times there were conflicting explanations on homework assignments for example. Also, too many typos throughout the semester.
10. Actual lecture
11. Better time management and explanations.
12. If there is a way to simplify the TBL system so that students may become more readily acclimated to it, that would be of great benefit. Also, more time for questions and answers regarding specific questions or about concepts would be helpful.
13. I would begin each TAP with a mini-lecture to cover general topics in the TAP if new information is covered. This will help enforce the information learned in the exercises.
14. Have a little bit of instruction time prior to each activity or at least unit.
15. Write down more during the mini lectures.
16. I feel that somehow incorporating some book stuff into the TBLs may be beneficial for when the homework comes around. Overall great class, I have always struggled with math at times and I feel like I actually understand what I am doing for the most part and Professor Dykes had a huge part in me getting over this hurdle. Awesome Prof.
17. Less team based learning more lecture and more examples in class

INSTRUCTOR-ADDED OPEN-ENDED QUESTIONS

Identify one or two specific "things" the instructor did to help make the TBL experience beneficial for you.

1. By holding each team member accountable for attendance, readings, and homework, we all were more invested in the class, which improved our understanding and application of the concepts.
2. I like how the roles were written out and we could rotate, so one person was not doing all the work.
3. Only gave a few copies of the TBL's per group so we were forced to collaborate
4. I think the graded, anonymous peer evaluations kept everyone accountable. I also think providing a limited number of activity sheets made it so team members had to work with each other, and thus, share ideas.
5. The group aspect really helped along with enthusiasm
6. Constantly informing the class about how the structure worked.

7. The professor walked around and helped students who were stuck during tbl exercises.
8. good groups, Packets were easy to follow
9. The homework assignments required the student to apply information to situations rather than simply looking at notes and copying examples.
10. Forced us to work together by only giving three activities.
11. Going over answers each question.
12. -Assigned decent group work -Was available to go over questions or concerns
13. Walking around and helping each group with any questions was extremely beneficial.
14. Having specific roles kept everyone engaged and accountable, but...
15. I liked that Prof. Dykes held my teammates accountable.
16. He would always walk around and help make sure each group is doing okay and was very open to questions.
17. None

Identify one or two specific “things” the instructor could have done (either better or at all) which would have helped make the TBL experience more beneficial for you.

2. I think a lecture before team work would have been helpful, to give the team more direction.
4. Either cut out some sections or condense them. There were several times we were very rushed to complete an activity and didn't take the time to understand it. Maybe have the irat and trat after completing the activity for that section? There were times during the activity where I had "lightbulb" moments and realized what a question on the irat/trat was actually about.
5. Made homework more similar to TAPs which he did do mid semester
6. Focus less on how TBL works and more about statistics
7. Nothing. It was a very good system.
8. sometimes explanation is quick and not fully compatible with homework
9. Explain concepts in a multitude of ways; do not just rely on statistical language because some may not have the same amount of experience in statistics considering 216 is a relatively low-difficulty course.
10. Have a lecture and then using the other members on your team as help if things are not still clear.
11. Provide an answer key from the LMs
12. -More time for Q&A about problems and concepts -More comprehensive instruction about using SAS (such as a document of commonly used functions and proper syntax)
13. I would have enjoyed a little bit more lecture because I felt I was not quite understanding the information in depth as I would have.
14. ...Not every role was important. Only the writer and flipper really "needed" to be engaged.
15. Written down more notes when lecturing. Some of the language is hard to grasp when it is lectured quickly. I also wish that some of the questions I asked weren't answered with other questions.
16. The TBL experience was great, I do not have complaints.
17. More lecture and more example in class

Identify one or two specific “things” you did to help make the TBL experience beneficial for yourself.

1. Doing all the readings is a necessity to do well on the I-RAT and T-RAT. They are a basic measure of understanding, but they do confirm that you "get" what you read.
2. Bouncing ideas off of team mates helped make the tbl experience beneficial to myself.
3. Did every reading before class so I was ready to contribute
4. I scheduled meet-ups with my teammates during the semester to work on homework together.
5. Communicated with my group
6. I did what the professor told me to do.
7. I read the book and took notes before class so I could help my team succeed during class.
8. showing up to class was the biggest part
9. I read all of the readings assigned, which helped me to better understand the material being discussed in class before I walked into class.
10. Ask team members for help in areas of confusion
11. Completed the pre readings and homework.
12. -Come to class prepared to work with group -Stay in contact with my group and ask questions if I had any
13. Doing the readings before hand and paying attention during discussion.
14. Tried my best.
15. I made myself the writer (even if I didn't have the final copy) so that I could write down notes directly on the questions.
16. I would do the pre readings the best I could so I was not a spud at the next class and could help contribute to my team and make the experience better for everyone.
17. Reach out to team members even if they never answered

Identify one or two specific “things” you could have done (either better or at all) which would have helped make the TBL experience more beneficial for you.

2. Going to office hours would have made the experience more beneficial to me. After reading and watching the videos, I was still very confused and felt like I was not very useful to my team.
4. I could have gone to the tutoring center more, or went to the professor's office hours.
5. Read more
6. Gone to the professor if I had questions.
7. I could have worked harder on the homework.
8. maybe read more, or try to understand material better
10. Spent more time on the readings
11. I could of read the pre readings in more detail and taken better notes in class
12. -Work ahead more often -Be more active in group discussions
13. I should have went to more office hours to ask questions and worked on the homework earlier to receive help if needed.
14. More preparation for class.
15. I could have started to make the cheat sheets for the exams earlier.
16. If I would have understood that pre readings are helpful before hand I do not think I would have struggled as bad in the beginning.
17. Read the book more in depth

A friend is taking STA 216 next term & wants a section on certain days/at a particular time. The friend learns the section is being taught using TBL; knowing you have experienced TBL, the friend asks your advice on whether to remain in the section or switch to a different same days/time section. Regardless of who the TBL-section instructor is, would you recommend your friend take the TBL section or switch to a non-TBL section? What justification would you offer if you are asked “Why?”

1. Yes, I would recommend switching. The structured in class activities and ability to work with teammates improves the class, in my opinion.
2. I think having a TBL learning experience is a great thing to have. My high school was all this. I would recommend taking at least one course that is TBL so that you get the experience of really working as a team.
3. Take TBL because it uses STA 216 to create real world research scenarios and forces you to participate in group work
4. I would tell them to switch to a non-TBL section. If you need more guidance on material or to see examples worked through before you start on the material yourself, a TBL format is not for you.
5. Take TBL it made class more interesting and easier to understand while working with your peers
6. Yes, the TBL is a good way of taking a statistics course. The structure also allows for being constantly informed about what is coming. Learning the structure is the hardest part.
7. I would say to take the TBL section because it is easier to learn in a group and everyone wants to succeed. There aren't group projects which is where groups usually fail so it is centered around your own individual success but working in a group. Also you make some good friends! I love it!
8. I would say it is worth it if this is the type of learning he uses because it is a good way to work through problems and share knowledge with a group
9. Yes because learning through collaboration rather than on an individual-to-professor level allows for students to interact more with people their own age. Sometimes a student who understands the material more than another student can explain the content in a new way that's different than the professor's explanations. Also, collaboration allows for learning both inside and outside the classroom much easier because one gets to know their group members well enough to ask outside of class for help.
10. I would suggest a non-TBL section if there is not time in their schedule to do the extra work a TBL section will require, such as thoroughly reading the chapters, taking notes on it, and watching the videos posted to blackboard.
11. I would say to switch based on how you learn best. If you like group and not as much lecture then stay. If you prefer lectures then switch.
12. The TBL section is beneficial for allowing the students to take control of their own learning, and allows them to work through concepts as a group rather than sitting in a lecture and taking notes. If they don't like lectures and can work with others to learn new concepts, then the TBL program would be beneficial for them. If they don't like to work in teams and would prefer the information to be taught more from the professor, then the TBL system may not be for them.
13. I would recommend STA 216 with TBL. TBL was an extremely beneficial way to learn statistics and provided opportunities to work with others to work through problems.
14. Take the TBL. The process keeps everyone engaged and accountable to their teammates. It also allows for constant self assessment of one's ability in the material. Unless the friend really likes lecture only classes, TBL is a good fit.
15. I would recommend that the friend takes the TBL section, but I might not feel the same way if I didn't have a wonderful team. I liked that you could work through questions together though. It also allowed me to connect with classmates if I needed their help with a question when studying for exams.
16. I would say yes, it gives you a group of students who all work together several times a week and that gives you comfort in the class to know you're not alone. As well as gives you more than just an instructor to rely on for help as well.
17. Non-team based learning, it just based on preference. I do not like this method of teaching and wish I would have taken a non-tbl