Northwestern

Individual Report for BIOL_SCI_378-0_20: Functional Genomics (Norman Wickett)

Course and Teacher Evaluations CTEC Winter 2017

Project Audience 28 Responses Received 21 Response Ratio 75.0%

Report Comments

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Creation Date Thu, Mar 23, 2017



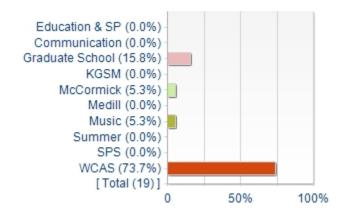
Northwestern University

Course Evaluations

Instructor	Course
Norman Wickett	BIOL_SCI_378-0_20: Functional Genomics

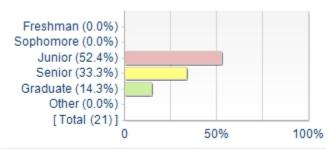
DEMOGRAPHICS

Your School



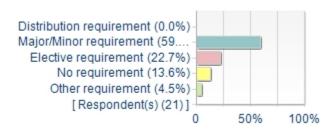
Options	Count	Percentage
Education & SP	0	0.0%
Communication	0	0.0%
Graduate School	3	15.8%
KGSM	0	0.0%
McCormick	1	5.3%
Medill	0	0.0%
Music	1	5.3%
Summer	0	0.0%
SPS	0	0.0%
WCAS	14	73.7%

Your Class



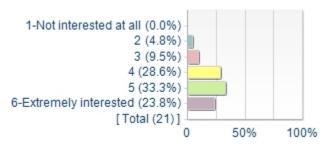
Options	Count	Percentage
Freshman	0	0.0%
Sophomore	0	0.0%
Junior	11	52.4%
Senior	7	33.3%
Graduate	3	14.3%
Other	0	0.0%

What is your reason for taking the course? (mark all that apply)



Options	Count	Percentage
Distribution requirement	0	0.0%
Major/Minor requirement	13	59.1%
Elective requirement	5	22.7%
No requirement	3	13.6%
Other requirement	1	4.5%
Respondent(s)	21	

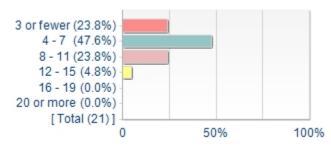
What was your Interest in this subject before taking the course?



Options	Count	Percentage
1-Not interested at all	0	0.0%
2	1	4.8%
3	2	9.5%
4	6	28.6%
5	7	33.3%
6-Extremely interested	5	23.8%

TIME-SURVEY QUESTION

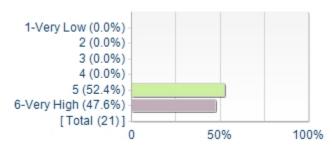
Estimate the average number of hours per week you spent on this course outside of class and lab time.



Options	Count	Percentage
3 or fewer	5	23.8%
4 - 7	10	47.6%
8 - 11	5	23.8%
12 - 15	1	4.8%
16 - 19	0	0.0%
20 or more	0	0.0%

COURSE QUESTIONS

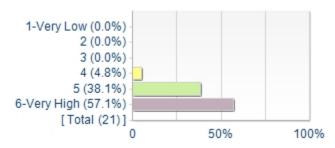
Provide an overall rating of the course.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	11	52.4%
6-Very High	6	10	47.6%

Statistics	Value
Response Count	21
Mean	5.48
Median	5.00
Standard Deviation	0.51

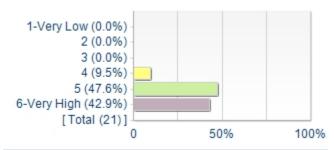
Estimate how much you learned in the course.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	1	4.8%
5	5	8	38.1%
6-Very High	6	12	57.1%

Statistics	Value
Response Count	21
Mean	5.52
Median	6.00
Standard Deviation	0.60

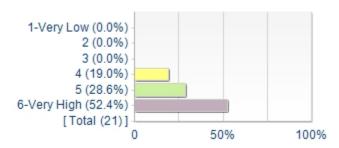
Rate the effectiveness of the course in challenging you intellectually.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	2	9.5%
5	5	10	47.6%
6-Very High	6	9	42.9%

Statistics	Value
Response Count	21
Mean	5.33
Median	5.00
Standard Deviation	0.66

Rate the instructional materials (texts, audiovisual materials, etc.) used in this course.

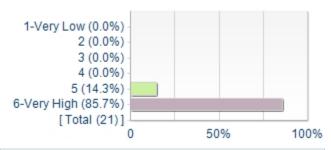


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	4	19.0%
5	5	6	28.6%
6-Very High	6	11	52.4%

Statistics	Value
Response Count	21
Mean	5.33
Median	6.00
Standard Deviation	0.80

INSTRUCTOR QUESTIONS

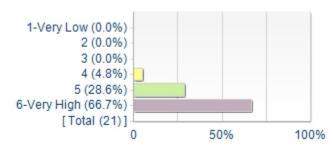
Provide an overall rating of the instruction.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	3	14.3%
6-Very High	6	18	85.7%

Statistics	Value
Response Count	21
Mean	5.86
Median	6.00
Standard Deviation	0.36

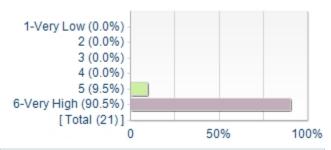
Rate the effectiveness of the instructor in stimulating your interest in the subject.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	1	4.8%
5	5	6	28.6%
6-Very High	6	14	66.7%

Statistics	Value
Response Count	21
Mean	5.62
Median	6.00
Standard Deviation	0.59

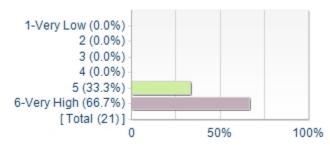
Rate how well prepared the instructor was for the class.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	2	9.5%
6-Very High	6	19	90.5%

Statistics	Value
Response Count	21
Mean	5.90
Median	6.00
Standard Deviation	0.30

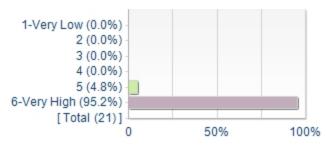
Rate the effectiveness with which the instructor communicated course content and ideas.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	7	33.3%
6-Very High	6	14	66.7%

Statistics	Value
Response Count	21
Mean	5.67
Median	6.00
Standard Deviation	0.48

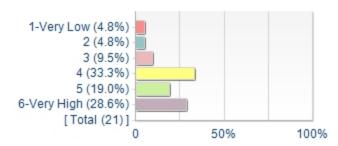
Rate the instructor's enthusiasm in teaching this class.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	1	4.8%
6-Very High	6	20	95.2%

Statistics	Value
Response Count	21
Mean	5.95
Median	6.00
Standard Deviation	0.22

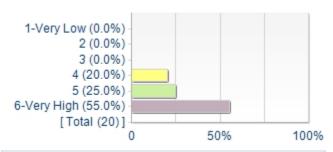
Rate how consistently the instructor returned assignments and tests promptly.



Options	Score	Count	Percentage
1-Very Low	1	1	4.8%
2	2	1	4.8%
3	3	2	9.5%
4	4	7	33.3%
5	5	4	19.0%
6-Very High	6	6	28.6%

Statistics	Value
Response Count	21
Mean	4.43
Median	4.00
Standard Deviation	1.40

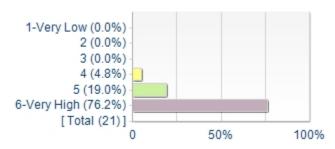
Rate the clarity with which the grading criteria were defined.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	4	20.0%
5	5	5	25.0%
6-Very High	6	11	55.0%

Statistics	Value
Response Count	20
Mean	5.35
Median	6.00
Standard Deviation	0.81

Rate how well the instructor answered students' questions.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	1	4.8%
5	5	4	19.0%
6-Very High	6	16	76.2%

Statistics	Value
Response Count	21
Mean	5.71
Median	6.00
Standard Deviation	0.56

OPEN-ENDED QUESTIONS

Did the course help you learn? Why or why not?

Comments

Yes

This class provided an overwhelming amount of information that took some time to digest and fully understand. Although, I definitely walked away knowing a lot more than I previously did.

Yes office hours made sure I was able to keep up on my understanding of the material. The book did not seem super necessary as the lecture seemed to do a better job explaining the concepts.

Yes, especially since the genomics field is constantly changing, so even the textbook we used was not up to date enough in terms of current processes used. The class with the papers selected by the professor was very useful in terms of learning what is happening right now in the field and gives a basis for understanding papers and experiments.

Yeah it's a very technical class and you learn that technical skill so (Thumbs up emoji)

Yes, I didn't know so much went into assembling a genome sequence and what you could learn from them. But after taking this class I realize the importance of sequencing a diverse selection of organisms and how to do that.

Read a decent amount of papers, but sometimes the papers were not really discussed thoroughly so they were a little confusing.

A lot! I conduct molecular ecology for my thesis. For this class, I learned a lot of basic concepts

I did not find the textbook necessary or all that helpful, and learned mostly from the papers assigned in class. I believe the slower pace of the class made it easier to study for the exams, but I would have preferred a faster pace to incorporate more information and challenge myself intellectually.

Yes, it provided a good foundation for understanding the technologies and applications of functional genomics research

Yes, this course definitely helped me learn. It was interesting to understand things in lecture and then go back to readings and realize that you can now comprehend parts of a paper that you could not before. It really made me feel like what we were learning was relevant and useful to my future biology career.

Yes. Professor Wickett's slides were very informative and suited his lecturing style well.

Please summarize your reaction to this course focusing on the aspects that were most important to you.

Comments

This class is good

Genomics with Norm is the best! While the information can be quite difficult to process, Norm makes it completely doable and will set you up for success as long as you put in the effort.

Overall I learned a lot at my own pace and through revisions of lecture materials at office hours. The professor was really helpful and patient with me. Unfortunately I did not agree with the system of pop quizzes and still argue that the goal to have students up to date on material could be just as easily accomplished with guizzes that have a known date.

The beginning half of the class seemed kind of useless to a pre-med student. It was mostly about technologies for sequencing genomes etc. that I will never use. Then it got into more stuff about actual genetics which was cool. The professor is one of my favorite professors at Northwestern. Hilarious if you're into his kind of humor like I was.

This class is an absolutely must-take. It is difficult as most people taking the class are fairly interested in the topic and study hard for exams, but it is well worth the struggle. Wickett is both very knowledgable about genomics and engaging of the class...not to mention hilarious. You will learn a ton about a very cool topic and though you will struggle and get a questionable grade, in the grand scheme of things, this class is incredibly rewarding.

This course involves quite a bit of reading but it's pretty spread out so it's not too bad. You definitely need to really learn the concepts well since all the tests are short answer questions and involves a lot of explaining. Actually going to class is pretty important to actually learn the material since a lot of details are only communicated verbally and not on the powerpoints that are posted.

Comments

This course is absolutely amazing!! Wickett is a very skilled and caring professor and I found his lectures incredibly engaging. I felt that I was able to develop a much better ability to understand complex scientific papers and seriously learned so much about genomics. His tests are all fair, he never tries to trick you, although you do need to put in the time to make sure you truly understand the papers and lectures. However if you ever have any problems if you go into his office hours you will definitely leave understanding everything.

This is a good class if you want to know how sequencing works and how to read sequencing papers. If that's what you are interested in take it if not don't

Great class! Norm is the best!! Even though the lectures are 1.5 hours, he makes them entertaining and interesting. Go to lecture to learn what Norm focuses on from the paper readings. Read the textbook for the material up to the first midterm and focus on literature paper later in the class! I really enjoyed the class and would recommend it to anyone interested in the applications of genomic sequencing.

Very friendly professor that seems to love the material that is taught. There are a fairly large amount of papers read, overall a good class

- 1. sequencing techniques
- 2. meta transcriptomes for functional ecology

A very useful class. Professor Wickett is extremely accommodating to every student's needs. The latter half of the course focuses heavily on the comparative genomics aspect of functional genomics. As a pre-medical student, I expected a more biomedical approach similar to 395 but ended up learning a lot about phylogenomics and genetic variation that solidified my understanding of biology as a whole.

Good overview of sequencing technologies; I now feel comfortable reading and interpreting genomics research/literature. I would have liked slightly more time spent on intraspecies variation.

It's a really interesting class. It gets harder towards the end of the quarter when you start reading a lot of academic papers.

Prof. Wickett is an incredibly good professor and really cares about his students understanding the material. Everything he explains makes total sense, and because the class is of a smaller size he goes back and explains things that don't seem clear to us. His powerpoints really add to his explanations and are very easy to follow when you go back to study for exams. Additionally, the papers and textbook readings we had were not excessive and all served a purpose, nothing in this class seemed like busy work. The pop quizzes were a good opportunity to see what the professor's questions on the test would be like, since practice mid terms are not provided.

Norm is an awesome guy is great at identifying the subjects people are struggling the most with and going through them step by step to make sure everyone understands. There's quite a bit of reading involved, especially for a biology class, but most of them are helpful in terms of rounding off your understanding of the various aspects of genomic analysis.

Take this class if you're interested in learning about sequencing technologies, which are only touched on briefly in Bio 390. Highly recommend. Professor is super nice and approachable. I thought I would be troubled by paper reading going into this class but the papers are really interesting to read and there are quite a bit of good thinking in them. READ the papers before class and after class. It's really important for the overall learning process for this class.

Informative slides, good lectures, and steady workload where information tied together nicely later in the quarter.

What are the primary teaching strengths of the instructor?

Comments

Knew everything

Norm's passion for the field truly showed and made this class an easy one to come to.

Very knowledgeable on the field and patient with students

- -Knowledge about the subject
- -(Attempting) to engage students
- -Sense of humor

He's very enthusiastic about what he is teaching and always tries to include interesting or fun facts about the material. The papers that were chosen to be read were also super cool.

Wickett is by far the best professor I've had at northwestern. His class was engaging, interesting, and challenging. He clearly really cares about this topic and also he really cares about his students. Also he is a very good teacher. Everytime I asked him a question or went to his office hours I felt that I benefited so greatly from it.

Really slick looking PowerPoint slides. Current research focused classes. Class is well focused with a clear goal and teaches you that goal

Enthusiastic and passionate about the class. It made more interested in the subject, which is actually fascinating.

Made classes fairly interesting and seemed to enjoy teaching.

- 1. Smart!
- 2. Well-trained research experience for himself
- 3. comprehensive for all the organism study

Great communicator, very friendly, and organized.

Enthusiasm; clear, engaging communication of important concepts and case studies

I really felt like Professor Wickett cared about me and my understanding of the material. Additionally he used humor to get our attention and get us to participate, where other professors may have grown frustrated or passive aggressive at a lack of participation. He is really good at explaining these concepts at a level that is easy to understand when you're not a genomics expert, which a lot of bio professors struggle with.

Engaging lecture style that was well supported by slides

What are the primary weaknesses, if any, of the instruction?

Comments

None, maybe grade faster

sometimes material goes a bit too fast in lecture and the reading material can pile on such that it is hard to keep up and participate

- -Organization
- -Getting assignments returned promptly

I think the way the powerpoints are structured could be better since reading it in class and out of class is kind of confusing. During class, he sometimes goes though the slides super fast, so I'm not sure what to write down in terms of notes. There's also quite a few moments where what is said in class is not in the powerpoints so I can't reference it after it's posted because it isn't in the slides. There are also a lot of questions on the slides asked in class, but the answers are not in the powerpoint, so if I didn't manage to write it down in class I couldn't review it later. There was also a lot of repetition in the powerpoints and questions that got answered a lot later, so in terms of powerpoints during class it was useful but reading it later by yourself made it hard to follow the train of thought.

Dunno how I feel about the pop quizes. Maybe we could do more in class activities like that one day. Otherwise nocomplaints

Could have made the power points a little bit more clear in assisting in explaining more complicated topics

no

Sometimes takes too much time to explain one concept, which slows down the pace of the class.

Occasionally assignments were given with somewhat short notice, mostly the final assignment that required group work.

Too much information at once on certain class dates.

Can you offer suggestions for improvement?

Comments

clarify which sections of assigned papers are important to focus on early on

Give more feedback on assignments

If possible, I have loved to run through papers in class more often because that was super helpful.

The readings had summaries of which sections to focus on which I didn't catch onto until later in the quarter so an emphasis on making this known earlier would have helped me personally. Also I still feel that quizzes with a known date are just as if not more effective in making sure people are up to date on the material if that is the goal of pop quizzes, especially if we know there is only one pop quiz in each half of the quarter- but I can see how students may be less likely to read and participate in class if not pressured to keep up with readings some other way

Mainly changes to the powerpoint structure as stated in the weaknesses section.

Those small group activities were effective. More would be good. I had a hard time focusing for a whole 120 min lecture

Preferring take-home exam! Give more time to dig out the guestions

It would be nice to have received feedback for assignments completed because the assignments were so similar to what we had to do for the final exam. I really appreciated having reading guides and think those should be retained in future classes.

I hope we can get some resources about how the computational/programming components of sequencing and analysis work although most bio majors can't program anyways...

More in class exercises like the tree diagram exercise. Maybe not as in class exercises but as a sheet of useful practice exercises.