CAS FALL-2013 AS101 B1 The Solar System

PROFESSOR Paul Withers
NUMBER OF STUDENTS RESPONDING: 74
NUMBER OF STUDENTS ENROLLED: 116
PERCENT OF ENROLLED STUDENTS RESPONDING: 63.79

STATISTICS REFLECT FREQUENCY OF RESPONSES

I. SECTION A: COURSE EVALUATION

		NR	1	2	3	4	5		MEAN	ST DEV
1. RELEVANCE OF ASSIGNED READINGS [(1) LOW TO (5) HIGH]	POOR	0	0	1	15	24	34	EXCELLENT	4.230	0.820
2. DIFFICULTY OF COURSE [(1) EASY TO (5) DIFFICULT]	POOR	0	0	7	31	28	8	EXCELLENT	3.500	0.815
3. WORKLOAD IN COURSE [(1) LIGHT TO (5) HEAVY]	POOR	0	0	6	27	29	12	EXCELLENT	3.635	0.853
4. OVERALL RATING OF DISCUSSION INSTRUCTOR (IF APPLICABLE)	POOR	25	0	0	9	22	17	EXCELLENT	4.167	0.724
5. OVERALL RATING OF LAB INSTRUCTOR (IF APPLICABLE)	POOR	1	0	2	11	33	27	EXCELLENT	4.164	0.782
6. USEFULNESS OF ASSIGNMENTS AND PAPERS	POOR	0	2	3	24	30	15	EXCELLENT	3.716	0.929
7. OVERALL COURSE RATING	POOR	0	1	7	24	32	10	EXCELLENT	3.581	0.891

II. SECTION B: FACULTY EVALUATION

		NR	1	2	3	4	5		MEAN	ST DEV
8. EFFECTIVENESS IN EXPLAINING CONCEPTS	POOR	1	0	2	20	33	18	EXCELLENT	3.918	0.795
9. ABILITY TO STIMULATE INTEREST IN SUBJECT	POOR	0	1	3	27	26	16	EXCELLENT	3.726	0.902
10. ENCOURAGEMENT OF CLASS PARTICIPATION	POOR	0	0	2	15	30	27	EXCELLENT	4.108	0.820
11. FAIRNESS IN GRADING	POOR	1	2	10	22	24	15	EXCELLENT	3.548	1.055
12. PROMPTNESS IN RETURNING ASSIGNMENTS	POOR	0	5	11	30	19	9	EXCELLENT	3.216	1.063
13. QUALITY OF FEEDBACK TO STUDENTS	POOR	0	1	11	22	29	11	EXCELLENT	3.514	0.969
14. AVAILABILITY OUTSIDE OF CLASS	POOR	1	0	1	15	34	23	EXCELLENT	4.082	0.759
15. OVERALL RATING OF INSTRUCTOR	POOR	0	1	1	19	32	19	EXCELLENT	3.931	0.845

III. SECTION C: TF/TA EVALUATION

		NR	1	2	3	4	5		MEAN	ST DEV
16. PREPARATION FOR CLASS	POOR	8	0	0	7	33	25	EXCELLENT	4.277	0.650
17. COMMAND OF THE SUBJECT	POOR	8	0	0	11	28	27	EXCELLENT	4.242	0.725
18. ABILITY TO CONVEY FACTS AND EXPLAIN KEY CONCEPTS IN A DIGESTIBLE MANNER	POOR	8	0	2	11	33	20	EXCELLENT	4.076	0.771
19. ENTHUSIASM FOR THE SUBJECT AND ABILITY TO STIMULATE STUDENT INTEREST	POOR	8	0	3	14	31	17	EXCELLENT	3.954	0.818
20. AVAILABILITY OUTSIDE CLASS TIME	POOR	8	0	1	13	27	24	EXCELLENT	4.138	0.788
21. QUALITY OF EVALUATION OF WORK	POOR	8	1	8	10	23	22	EXCELLENT	3.891	1.071
22. PROMPTNESS OF RETURN OF GRADED ASSIGNMENTS AND COMMUNICATION OF STANDING IN CLASS	POOR	17	4	9	17	20	7	EXCELLENT	3.298	1.101

IV. SECTION D: OTHER

		NR	1	2	3	4	5		MEAN	ST DEV
23. CLARITY AND ACHIEVEMENT OF COURSE OBJECTIVES	POOR	1	0	5	19	32	16	EXCELLENT	3.819	0.861
24. EFFECTIVENESS OF THE USE OF CLASS TIME	POOR	1	1	6	20	28	18	EXCELLENT	3.767	0.965
25. VALUE OF COURSE TOWARD DEVELOPMENT OF INTELLECTUAL SKILLS (CRITICAL ANALYSIS, WRITTEN/ORAL COMMUNICATION, RESEARCH)	POOR	1	1	9	32	23	8	EXCELLENT	3.384	0.892
26. LEVEL OF INTELLECTUAL STIMULATION OF THE COURSE	POOR	1	0	7	27	26	13	EXCELLENT	3.616	0.892
27. VALUE OF LAB/DISCUSSION AS A SUPPLEMENT TO THE LECTURE/READING	POOR	2	6	12	23	19	12	EXCELLENT	3.264	1.175
28. PROFESSOR'S PREPARATION FOR CLASS	POOR	0	0	2	6	25	41	EXCELLENT	4.419	0.759
29. PROFESSOR'S COMMAND OF THE SUBJECT	POOR	0	0	3	7	23	41	EXCELLENT	4.378	0.823
30. PROFESSOR'S ENTHUSIASM FOR SUBJECT OF THE COURSE	POOR	2	0	2	5	21	43	EXCELLENT	4.479	0.753
31. TO WHOM WOULD YOU RECOMMEND THIS COURSE? (SELECT ONE PLEASE) [1=NOBODY, 2=ONLY MAJORS/MINORS, 3=ONLY MAJORS/MINORS WITH GREAT INTEREST IN SUBJECT, 4=STUDENTS SEEKING DISTRIBUTION/DIVISIONAL STUDIES CREDIT, 5=STUDENTS SEEKING AN INTERESTING ELECTIVE]	POOR	2	4	11	9	32	16	EXCELLENT	3.625	1.156
32. HOW MUCH TIME PER WEEK OUTSIDE OF CLASS DID YOU SPEND ON THE COURSE? [1=LESS THAN 1 HR., 2=1-3 HRS., 3=3-5 HRS., 4=5-10 HRS., 5=MORE THAN 10 HRS.]	POOR	1	0	23	32	17	1	EXCELLENT	2.945	0.780
33. WHAT GRADE DO YOU EXPECT IN THE COURSE SOLELY BASED ON WORK COMPLETED THUS FAR? [1=F, 2=D, 3=C, 4=B, 5=A]	POOR	1	0	0	7	48	18	EXCELLENT	4.151	0.569

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**Fall 2013
Course Evaluation Comments**

Course: AS 101 B1, The Solar System
Instructor: Paul Withers

1. What were the most positive aspects of the course?
- Really nice Professor
- Professor Withers is awesome
- I liked the night labs
- Interesting subject matter
- Topics are interesting
- It's not hard and interesting
- Clear to thorough understanding of the astronomy basic
- Interesting, good professor
- Looking at the big picture
- Nothing
- Professor Withers
- Professor Withers was engaging and clearly knowledgeable on the subject
- Interesting subject
- I liked lab
- Power- point sliders are helpful
- The work was not too demanding and deadlines were reasonable
- Prof wither's enthusiasm and attitude
- It was very different and interesting
- It is interesting
- Professor actually tried to remember student's names in lecture
- Well organized, all faculty and TAs were prepared and very helpful
- Withers is very enthusiastic and interesting to listen too
- Interesting activities, labs
- Interesting all around class
- Withers is a good guy, he explains concepts very clearly
- Interesting
- The subjects we covered were interesting and we did not spend too much time on each chapter so all the material was adequately covered in class and in lab
- Learned a lot of things that I didn't know before, very interesting, demonstrations were the best part
- Class participation was good
- There are none!
- Withers obviously is very intelligent and I liked the conceptual material
- I enjoy learning about astronomy. I had a good TA
- Interesting
- Lectures → engaging
- Stimulating interests of Astronomy

Note: (?) indicates that the student's handwriting was illegible and the best effort was made to interpret what was written.

AS 101 B1
Withers

- Very interesting facts about space, planets, solar system formation, great lectures
- The facts and concepts were very interesting
- Prof. Withers is enthusiastic about the subject. Emmet was able to explain things that were unclear to me in an easy way
- Makes me love astronomy
- Great enthusiasm, interesting topics
- Lectures
- Interesting
- I really enjoyed lectures and a few of the labs
- Professor withers cares!
- Professor Withers is amazing
- The most positive aspects were Prof. Wither's enthusiasm and seeing a real0 life scenario when he helped send the maven to mars
- A lot of new info learned, interesting
- Interesting subject
- Night labs
- Amount of time to hand in assignments
- Interesting, I loved the night labs
- Very different and new knowledge, Night lab night lab night lab night lab!!
- Everything
- The amount of student participation in class
- Videos
- The topic of the course and the explanation of the material in an easy to understand way

2. What, if any, changes would you recommend for the next offering of the course? Be as specific as possible.

- Almost all the homework questions can simply be googled
- Not really for people who aren't good at math
- Labs were long and lab time was short, lab reports were annoying: some Q's repeated, " Busy work"
- Clearer labs
- The math portion of the course needs to be more thoroughly explained for test purposes
- No changing(?) would be great
- Question should be less guessing number related, Ex. Distance from sun to Jupiter if sun = grapefruit size, where is Jupiter
- Perhaps make things a little easier to understand at time, more feedback on homeworks
- More announcements posted online
- More relevant lectures
- Focus more on the textbook during lectures
- More fairness in grading, more planning of labs to correspond with lectures
- Surprisingly hard for a 101 class

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AS 101 B1
Withers

- More focus on material form book in lectures
- More help offered with math questions and exams in general
- More clarity in explanations, better lab assignments
- Stop group discussions, not beneficial and wastes time
- If the labs were about what we are talking in class
- Homework should be more relevant to lectures and lab is useless and irrelevant. Night labs suck
- The course should reduce the amount of day labs (not every week, like physics classes) but add 2 more night labs per semester
- No written labs
- More fair deadlines for assignments
- The labs aren't all very helpful in understanding the lecture material
- Make labs more specific to lessons
- Help with math more
- Less physics
- The stuff on the tests does not come from lectures – it should
- More review please
- Lecture slides don't convey much information- useless as study tool
- Be less difficult in grading. This is an astronomy for non- astronomy majors, we don't know physics or care to ever learn it. Teach us the stuff on the test, like the MATH! If you don't teach us something, DON'T TEST US ON IT!
- Less math. Obviously it is an important part of real astronomy but it's bringing my grad e (and my GPA) down as a non-major/minor
- I would lessen the workload. It got a little out of hand and there was so much grading to be done the TA's couldn't handle it
- Actually make lecture valuable – nothing from lecture goes with the tests. Focus more on math in lecture too
- More prep for tests
- Remove labs, useless for the class other than adding extra busy work. Disrupts learning
- No lab, has no value even though I really liked my TA
- Spend more time in the math sections and more examples
- It's all good to me
- Better labs, more clear lab assignments
- Relevant labs
- How multiple choice and fill in the blank is worth 3 points
- Making labs more related to the class. Also I felt consistently unprepared for the midterms. The practice exams were ten times easier than the actual test and usually not very similar
- Written lab reports were un-needed
- Less math or lower the level of difficulty
- Night labs: maybe just have it attendance based grading rather than filling out a sheet
- Grade more fairly on homework and not so harshly

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- Drop the lowest lab grade and weigh the midterm with the higher grade more heavily to accommodate for a student's improvement
- Make exam difficulty closer to class lectures and practice problems
- I don't feel as though many of the labs were pertinent to anything we learned in class or immediately useful for exams
- Less workload
- Nothing
- Some of the labs felt unneeded
- Less labs
- Make labs follow lecture
- Maybe a little more direction in lab

3. What, if any, adjustments would you recommend to the instructor's teaching method or style?

- Promote more class discussion
- Hard for non-sciency people
- None- Prof Withers is great!
- Teach math portion better
- Maybe do more calculation problems during class
- Laser point too bright
- More mastering astronomy demos
- Demonstrations were helpful, more would be nice
- The grading system isn't consistent between the assignments
- Discussing with partners in lecture didn't really help
- Stop the class discussions and mini questions, test more like you teach or teach more like you test
- None
- I would use less of the tetorials (masteringastronomy.com) in class and instead make them required homework assignments. We could use our time better, different ways in class
- His lectures can be a bit dry sometimes and at times he overuses the "talk to your neighbor" method
- Do exams that are related to the class material
- More exciting powerpoints
- Tests should relate more to lectures
- Maybe less use of "talk with your neighbors" in class. I didn't really find that anymore helpful than just talking about it in the lecture
- Be more enthusiastic about the topics!
- Perhaps a bit more energy
- None
- Your lectures are really slow. Don't just read the slides. When the clock says 10:50 – CLASS IS OVER. STOP TALKING!
- Making the class based more on the textbook
- None, he's awesome

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- None, he's great
- He spends little time on explaining things that are even remotely difficult, like he doesn't know much about it
- It's all good
- Not as much small visuals
- More math practice
- Talking with a classmate wasn't particularly helpful
- Good!
- None
- None
- Try to engage class better
- Don't disappear for two weeks then give an unfair exam you didn't prepare us for
- Use less tutorials from the online book

4. Comment on the feedback you received from the instructor of the course. Was it useful?
- Yes it's useful
- Yes
- Yes, however at times I would have liked to receive more feedback
- Yeah
- No
- Prof withers is one of the most helpful professors in office hours
- Did not receive much feedback
- Yes
- It was alright
- Yes
- Yes
- Yes
- Yes, precise and concrete
- No.
- No feedback given
- I have no clue where I stand
- He never gave no feedback – he made the TAs do all the work
- Generally, yes. He gets wordy sometimes
- Yea, the feedback was nice
- Yes!
- Yes! Always stayed after to help me and give feedback
- Didn't receive any feedback
- Yes
- Yes I read it and improved myself in next assignment
- Yes, helped me know where I stand
- Yes
- I didn't really feel like I got that much feedback
- Withers was very helpful

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- Prof withers is very helpful and takes a huge interest in his students
- When I had a questions a response was quick and accurate
- Yes
- Yes it was useful on homework assignments
- Sometimes the grading of assignments was rushed so I didn't really understand why certain things were wrong
- Yes it was helpful
- Yes
- Yes
- Yes
- Only feedback form TAs
- I received little feedback

5. Comment on the frequency and length of assignments, exams, and lab reports.
- Lab reports: time consuming and tedious "busy work"
- Homeworks were manageable, everything was good
- Some homework problems longer and expected answers
- Appropriate frequency
- It's not hard but I wish can get it back within 1 week
- Fair
- Too long, hard, irrelevant
- It took me way too long to write a lab report, not something that's relevant to a non-science major
- Very reasonable and fair
- Hw assignments were neither too long nor too short and helped understanding at subject/encouraged reading
- Homeworks weekly were helpful
- Obnoxiously time consuming – all aspects
- The frequency of homework is reasonable but exam and lab would be better with longer time between
- Not bad
- Lab reports were terrible (the written ones)
- Overall a bearable amount of work, some extensive lab reports
- Everything assigned was very useful for exams
- Lab were sometimes messy, not clear. Writter reports were too long and about too many experiments
- There is one homework and lab due every week which is time consuming but irrelevant
- No written labs
- More than they should. It is an introductory course and there were more than enough assignments
- A lot of work but good amount of time to complete
- Lab reports were very long
- Right amount

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Withers

- Homeworks take too long
- Good
- Homework length was fine with more than enough time to complete the weekly assignment
- Frequency/Length of assignments and labs was perfect but I always felt rushed on exams
- Night labs were inconvenient and tricky, them and day labs and homework was a lot
- Tests are significantly harder than necessary and can sometimes be quite subjective
- Too many difficult HW questions! Labs were ridiculous and dind't match up in the lecture. Lab reports too long!
- Assignments are reasonable, but prep for exams is extensive due to the math portion
- Very long assignments every week, exams not bad, written lab reports were terrible
- The assignments were relevant, however the TA's had very different grading methods
- Homeworks and labs were tedious but not too hard
- Assignments are pretty well designed, it has a proper length
- Very frequent fairly long assignments, labs in addition to HW make it too much
- Way too much work for a 100 level class
- Good – useful
- Lab report is a little long
- Weekly hw is good, lab reports take a while
- Too much work on irrelevant labs, some irrelevance in HW
- The labs we had were ridiculous, the lab materials were almost always confusing and I always felt like we were (?). homework was more tolerable but a lot of the time I felt like we were being marked off for things we didn't even know were supposed to be doing and wasn't mentioned in the questions
- The HW were reasonable and did reinforce class topics and readings
- Assignments took too long to complete, the first exam was ridiculous, lab reports were unnecessary
- The assignments and in particular exams were not as difficult as people make them out to be. For the math sections the info was all there you just need to know how to use it
- Lab reports – way too much work
- Homework assignments every Wednesday and lab reports everything Thursday – they took a long time
- Sometimes the assignments were vague
- I thought we were given enough time to do assignments and exams weren't too frequent
- Lab reports were really long
- Too much homework and lab assignments

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- The length and frequency of assignments, exams and lab reports was very good
- The perfect amount not overbearing but enough
- Took a long time
- Not too many assignments, decent length, fair exams, lab reports were long

6. Comment on the selection and amount of reading. Which readings were the most and which were the least valuable? Why?
- Textbook is the most valuable, Mastering astronomy.com is also useful for reviewing
- Textbook is enough and it's interesting reading it
- Textbook, good supplement
- Yeah
- Too many
- They were all valuable
- Most valuable = textbook
- Not many assigned readings
- Reading from the book were fine
- Onlies(?) stuff is pretty helpful
- Optional but useful
- Chapter readings were long
- Ok
- Didn't read that much
- All readings valuable – first textbook I've ever read cover to cover
- Homeworks were tedious and not a good tool
- Book didn't help. I looked up everything online
- All text readings were very helpful
- Readings never really helped me considering the exams wer not entirely based on them
- All readings applied to hw and tests
- Chapters were long but it wasn't awful
- Useful
- Equally valuable
- It's all important
- Each chapter was useful
- All readings were good – key concepts
- Readings were really only valuable because they directly related to the midterms
- Readings were fine
- The HW helped focus the readings – all good
- Reading of the chapters was helpful in learning the course material
- I found reading the textbook was useful for completing homework
- The online tutorial is least valuable (not helpful) the book is most valuable (clearity(?))
- The selection and amount of reading was good, they were all valuable because they helped reinforce what was taught in class

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- Only really had textbook
- Were valuable
- Few readings

7. Comment on the TA/TF or lab instructor for the course. What did he/she do well? What could he/she improve?
- See separate TA/TF comments if applicable.

8. What skills and understanding have you gained from this course?
- I know a lot more about space and the solar system (and physics and chemistry and the sky and light)
- Understanding about the solar system
- Know the basic info about AS
- Thinking outside the box
- None
- Mathematics, reasoning, abstract concept familiarity
- Knowledge of solar system
- Reading books and getting useful information
- Astronomy is different than I thought
- Great intro course, provided me with ability to study effectively and efficiently
- How the universe works
- How the solar system works
- Solar system
- Acquire and condense new info on a subject
- Hay (?)
- Study up
- Basic understanding of space, the solar system and how it all ties together
- A good grasp on the how and why of solar system features
- How to do labs
- NOTHING!
- I learned enough about space. I will never need to know more
- More info on the solar system
- Knowledge of solar system
- Reading and learning stuff
- Some knowledge of astronomy, how to find stars, how to do experiment
- A lot about space and it's key concepts
- Appreciation for general science stuff, made me think about the pic picture (universe)
- Nothing except the sun is big and hot
- I have gained a basic understanding for lab report writing I will expand on
- A lot of astronomy knowledge
- Better understanding of our solar system and how it works
- Basic lab work and lab reports
- Telescope! Everything about solar system!!!! How stars/planets are formed

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Withers

- I learned about the formation and structure of the solar system
- Study skills
- Study for test
- I have gained some physics knowledge and a lot about the solar system

9. General Comments:
- First midterm average was very low, needed curve
- Great course and professor
- It's a great course
- Professor's green laser point was too bright
- No
- Prof was gone for half the semester
- Gotta love Prof. Withers!
- Not really bad
- Boop Beep Boop
- Overall a great lab course
- Had no interest in this subject, still have none. Kind of hate astronomy now
- Good class
- Take if you love astronomy, if not get ready to struggle
- This class was horrible I wish I never took it!
- Professor Withers is a good man and good teacher. Chad Madsen needs to do less.
- Honestly, this class is way too much for 101 and withers needs to tone down his math on the test. I highly regret this course.
- It's a pretty good class
- Good cause, tests too short/difficult, hard to do well on
- Overall great course, great teaching staff
- Good course!
- Should be more helpful during lab. I would suggest talking to the students more during lab rather than hanging back
- Nice class, come with passion and leave with knowledge!
- My favorite course so far
- None

Note: (?) indicates that the student's handwriting was illegible and the best effort was made to interpret what was written.