

# Excellence in Teaching



## Jim Dyer Chemistry

### Teaching to make a difference

Jim Dyer went into teaching because he likes to make a difference. Jim joined the Western Oregon University faculty in fall 2005. His teaching philosophy is simple. Jim tells his students, "I care, I'm fair, and I know what I am doing." This lays the foundation of trust and rapport in the classroom. He communicates his knowledge and his concern for student learning and student success daily in his classes.

Jim teaches several chemistry classes and labs at Western, including the Introductory Chemistry series: General, Organic & Biochemistry (GOB for short), and has even had an opportunity to teach in the Honors Program. He brings a wealth of experience to our campus. Jim has an Ed.D. in Science and a Masters in Chemistry from Ball State University in Muncie, Indiana. He taught at both Ball State and ITT Technical College before coming to Western. In addition to his teaching experience, Jim worked in an environmental lab in Indiana. Jim lives in Monmouth and enjoys the beauty of the Willamette Valley.

### Helping students learn

Making the material accessible and understandable for students is Jim's primary goal. To accomplish this task he puts his notes and homework on PowerPoint slides and on the WebCT platform. Jim doesn't present the information in only one way but strives to offer students the chance to interact with the material in a variety of ways. In his GOB class, for example, students can explore three-dimensional (3D) diagrams of the molecules, and draw the molecules themselves from the formula, so that they gain experience with different notations and representations.

Creating a safe area for students to make mistakes is one thing that distinguishes Jim's teaching. He does this by providing students safe opportunities for self assessment. The daily homework assignments and in-class participation opportunities give students ample time to assess their work without a negative impact on grades.

#### Survey 1

**Instructions:** Preliminary Questions (Please answer these at the end of the survey). This is the "beginning" of the course. Your responses to the following will help me to serve you better. Thank you.

**Notes:** Your responses to these are purely voluntary. You should feel comfortable to not answer any question you do not want to. Your responses (but not your identity) may be shared with other concerned parties.

**Preliminary Questions:**

1. Please provide a brief explanation of your ability to access this site. This may help improve the design of the course. Here is some of the type of information you might see: type of computer (e.g. desktop or from home?), your accessibility to it, its processing speed.

2. Why did you take this course?  
a) 1st time, or 2nd semester in high school  
b) if you could, how would you rate the "importance" of this course for you?  
Scale: 1 (of lowest importance) - 5 (of greatest importance)

3. Explain your score in words.

4. How many semesters of chemistry have you had?  
• more than 4 semesters  
• 4 semesters  
• 3 semesters  
• 2 semesters  
• 1 semester  
• 0 semesters

5. What was your chemistry experience before this semester?  
a) 1st time, or 2nd semester in high school  
b) if you could, how would you rate your "Academic Preparation" for this course?  
Scale: 1 (of lowest experience) - 5 (of greatest experience)

6. Explain your score in words.

7. What is your "gut feeling" about chemistry for this course?  
a) It scares me. I think it's something for "those smart people" and not necessary for me.  
b) I would like to take your "confidence" to be able to do well in the course?

8. Explain your score in words.

9. What are your goals and expectations for this course? (on grade level)

10. I am not allowed to share the responses of the class.  
I am okay with having my responses shared with the class in an anonymous way.  
I am not okay with having my responses shared with the class in an anonymous way.

#### Survey 11

1. What word or a couple of words would you use to describe your "participation and/or engagement" level for this course?

2. Briefly, describe how "challenging" this course was for you?

3. What word or couple of words would you use to describe your attitude during this course?

4. Briefly explain the color that you got out of the feedback for this course.

5. Please provide any additional feedback that you would like regarding your personal performance as it relates to this course.

6. Let's consider your own time. Please explain how your past constructively & or not so constructively affected your learning experience.

7. Briefly, what did you like/dislike about the In-Class Activities (ICAs)? Would you recommend keeping them or dropping them?

8. Briefly, what did you like/dislike about the Online Class Activities (OCAs)? Would you recommend keeping them or dropping them?

9. What was the "good" and the "ugh" for you as it relates to the lab? What might make them a better experience for you and others?

10. What was the "good" and the "ugh" for you as it relates to the course? What might make them a better experience for you and others?

11. What do you think about the surveys and other feedback instruments in this course? Do you think your voice is heard and your response valued?

12. Any additional constructive feedback regarding the assignments and/or course design?

13. Please restate me: Why did you take this course? (also include: your major area of study)  
Scale: 1 - 5

14. What is your next chemistry course? (e.g. 105, 225, 300, other?)

15. What was your most memorable aspect of this course for you?

16. Briefly describe the areas that "scared" or "bored" you the most for you in the course.

17. How has this course not met (or not met) your expectations? What might you do differently, if you could turn back the hands of time?

18. What constructive feedback do you wish you had received as it relates to your course?

19. What might have helped responses would you like to share with the rest of the students?

20. Any additional comments you would like to share?

### Using technology to improve teaching and learning

"Every student is different," Jim observes, "and my strength is recognizing the strengths and weaknesses of the individual student. We can then work together to build a solid understanding of chemistry." Jim often begins these interactions with a question, "So what do you think?"

Jim actively solicits feedback from students, including links on his WebCT course materials for students to anonymously report back to him how things are going. Jim says that soliciting feedback in courses that students perceive as hard or which students view with phobia is vitally important. The online survey provides Jim with information about the course and about students that he uses for continuous improvement. The course surveys include information about why students are taking the course, their previous experience with the material, and their feelings about the subject matter. Jim also asks about students' goals, expectations, and learning styles.

Students reflect on the usefulness of the textbook, the assignments, the labs, and their own personal performance. The questions are skillfully constructed to remind students that the usefulness of the resources ultimately depends on the effort they put in to the course. He also makes use of the surveys to obtain information about the examinations. First, he inquires about students' perception of their performance, by asking how they think they did on the exam. Next, he asks how students prepared for the exam. This tells Jim something about students' study habits. He then asks students to evaluate how well their preparation for the exam actually fit the exam itself, which requires students to reflect and analyze their own learning. Lastly, he asks students to take responsibility for their learning and to consider ways they might change their strategy for future exams.

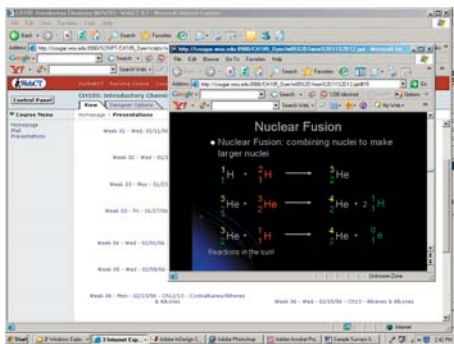
Using technology to obtain feedback from students is an innovative way to improve one's teaching. Data from the surveys is available to the entire class through the course website, and this openness creates another opportunity for conversations about teaching and learning. Additionally, the information students provide in the surveys is a rich source of evidence about teaching and learning.

Like the character in the fairy tale, Jim finds Western to be a good fit. He likes WOU because it is not too big – faculty know students and students know faculty, they aren't anonymous – yet not too small ("there is always something going on here, the campus is full of life," he says). He likes the attitude of faculty and staff here and their student focused orientation.

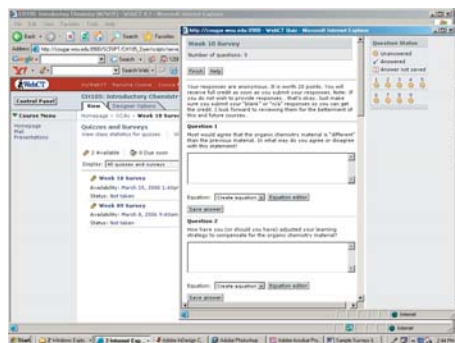
### What students say about Jim

*I nominate Dr. Dyer in the science dept for the Celebration of Teaching Excellence. He is the best teacher I have had at WOU. There is just so much to say about Dr. D. He makes chemistry fun with his sense of humor, and his understanding of students. He doesn't expect us to be scientist but to do our best, that seems to be all he ever asks. He spends so much time preparing his lectures I think he may be sleep deprived. He is always around if you need to ask him questions. I've never liked chemistry until Dr. D (I deeply despised chemistry in high school). He not only is a great teacher but he is a great friend. If Dr. D leaves WOU I will never take another chemistry class here at WOU. HE IS THE ABSOLUTE VERY BEST!*

Sincerely-  
Dominique Lazott



Samples from Jim's WebCT Chemistry course



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for  
Teaching  
&  
Learning