

Putting blended and active learning into practice

John L. Falconer: Mel and Virginia Clark Professor Emeritus, University of Colorado
President's Teaching Scholar (Monday-Friday)

Janet deGrazia, Teaching Professor, University of Colorado Boulder
(Monday-Wednesday)



Speakers



John L. Falconer, Professor Emeritus of Chemical and Biological Engineering and a President's Teaching Scholar at the University of Colorado Boulder.

John has combined a successful chemical engineering research career (> 235 journal articles and 20 patents) with a desire to make engineering education more engaging and effective than the courses he took as a student. He has incorporated results from the

educational research into his teaching, and led the development of the chemical engineering educational resources on www.LearnChemE.com and the screencast videos on www.YouTube.com/LearnChemE, which has > 92,000 subscribers.

John has won university and national teaching awards, including the AIChE Warren K. Lewis Award. He extensive experience in teaching engineering courses, ranging from large undergraduate classes through to specialised graduate courses.



Janet deGrazia, Senior Instructor Emeritus and Assistant Adjunct Professor at the University of Colorado in Boulder.

Janet was one of the first Teaching Professors ever selected at the University and has published widely on engineering education. She has won numerous awards for teaching at national, university, campus and departmental level, many of which have been student-nominated.

An original member of the LearnChemE team, Janet has developed resources to support active and blended learning in engineering classes, and has adapted these resources to successfully flip the classroom in courses as large as four hundred students.

Janet's current focus is using technology to encourage faculty to incorporate active learning in the classroom. She is currently an Erskine Fellow at the University of Canterbury in Christchurch, where she sharing her teaching techniques with students and educating faculty on innovative educational reforms.

Monday 3 June

Workshop: Introduction to active and blended learning: what, why and how?

Location: 50-C207, 9:00-12:30

9:00-10:30 Why Active and Blending Learning? Because Learning is Not a Spectator sport

Studies show that people learn by practice and feedback, not by someone telling them, and that student outcomes are dramatically better when active and blended learning are used. So what are they key elements of active and blended learning, and why are they effective? This session demonstrates how active learning can be effectively embedded within a traditional lecture format, for an engineering course with significant mathematical content.

11:00-12:30 Doing is Better than Watching: how to make it work

The sessions is focussed on practical approaches to get engage students in content, and get them to class. Blended and active learning sound great, but how can you cover all the course material using these approaches? How much work does it take to flip a classroom? What if the students hate it? This session deals with the realities implementing active and blended learning for busy academics. Active and blended learning for an engineering course will be demonstrated, using conceptual questions, student response systems (clickers), peer instruction, and students working on partially-solved problems.

Tuesday 4 June

EAIT Teaching and Learning Forum

Workshop: Designing assessment to encourage and verify learning

Location: Indooroopilly Golf Club, 8:30-4:00

9:40-12:00 Designing Efficient, Effective Assessment

(Session 2 workshop)

Part 1: Testing is the most effective way for students to learn, but what is the most effective way to test?

This workshop discusses a staged approach to assessment, to encourage and verify learning and increase student engagement.

Part 2 : Efficiency in assessment and instruction (Using the best software programs ever)

(Session 3 workshop)

Assessment is an important part of learning, but providing students effective feedback on assignments and exams can be time-consuming. This session covers: 1. How to design exams to make grading easier, and 2. How to reduce grading time and improve feedback to students using appropriate software.

Wednesday 5 June

Workshop: Putting active and blended learning into practice

Location: 50-C207, 9:00-11:45

9:30-11:50 Making and using screencasts

Screencasts are a central feature of blended learning and flipped classrooms.. Why are a few 6-minute screencasts better than a 50-minute lecture? Because screencasts are limited to a narrow subject, students like them and use them. We have received more positive feedback from students on screencasts than on anything else we have done in teaching. They have advantages over textbooks: diagrams can be presented sequentially instead of all at once, and presenting a diagram with a verbal explanation minimises cognitive overload. Getting the best value out of screencasts requires good teaching practices. This session introduces you to the practical aspects of:

1. Preparing your own screencasts
2. Incorporating screencasts into your teaching to engage students and improve learning
3. Advice on how to find the best screencasts online

Panel Discussion: Student attendance is at an all-time low. Can you get a good education without coming to class?

Location: 50-T203, 12:00-1:00

Online resources are rapidly, radically and potentially irreversibly changing how we teach and how students learn. Is this the greatest advance in education of our lifetime, or a temporary fad with long-term repercussions? Our panellists will debate this topic, bringing with them a wide range of experience and opinions. There will be opportunities for audience participation input.

Thursday 6 June

Seminar - How Students Learn (Are we giving students bad advice?) John Falconer

Location: 49-502, 12:00-1:00

In order to help our students succeed, we need to know the most effective ways for students to learn. Should we encourage students to reread their textbook, review their class notes and/or look over the solutions to homework problems before an exam? What is our basis for providing suggestions to students who do poorly on the first exam in a course? This session incorporates current research findings on learning, and provides practical information on how academics can help undergraduates improve their abilities to study and learn.

Friday 7 June

Seminar: How to learn effectively: getting the best value from your study time. John Falconer

Location: 50-C207, 12:00-1:00

What is the most effective way to study and learn? Studies show that students are not good judges of which approaches result in durable memory because they have a faulty model of how people learn and remember. Moreover, most students have not been exposed to effective study methods. This session provides undergraduate and postgraduate coursework students with efficient and effective strategies to prepare for exams without devoting more time to studying.

Program

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Registration

Please RSVP by close of business on 31 May 2019

[Register Now](#)

Further Information

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