



**CENTAUR**  
**BIOMECHANICS**

2 Day Equine Biomechanics Course

“Back Biomechanics and Horse & Rider Interaction”



# Introduction

Centaur Biomechanics is a leading biomechanical company, specialising in the biomechanics of the horse and rider, working with horses and riders of all levels from beginner through to Olympic level. Since 2011 Centaur has delivered biomechanics courses to the industry with specific courses being commissioned for ACPAT, IRVAP, SMS, IAT in the UK, Canada, Columbia and Italy. The aim of our courses is to share knowledge and provide the industry with some of the latest and most current research into equine performance.





# Introduction

Centaur Biomechanics carries out peer reviewed research and collaborates with internationally recognised research centres throughout the world in order to improve welfare, soundness and performance of the ridden horse. Russell, course leader and founder of Centaur Biomechanics, regularly presents his research at conferences internationally. Currently doing his PhD at the Royal Veterinary College, he is looking at horse and rider interaction - in particular how the saddle and rider affect the spinal kinematics and locomotion of the horse. Russell's research portfolio, expanding over ten years, has included projects looking at the effect that girths, bridles, surfaces, travelling and riders have on the horse.





## Course Structure

We pride ourselves on being able to offer a unique environment in which the learning experience is optimised. Using state of the art technology and bringing together some of the latest research into horse and rider interaction, our biomechanics courses are interactive, delivered in small groups. We combine both theory and practical sessions, all of which are supported by high speed videos taken from major events such as London 2012, Badminton, World Equestrian Games, Europeans along with images from dissections.





## Back Biomechanics and Horse & Rider Interaction Saturday 5<sup>th</sup> August & Sunday 6<sup>th</sup> August

**This 2 day course is in part delivered by Mark Fisher SMS Saddle Fitter,  
London 2012 Saddle Fitter and Consultant Saddle Fitter to the BEF**

Mark Fisher left the King's Troop RHA as the Master Saddler in 2004, after 22 years' service. In the army, he competed in eventing, where he reached intermediate level and in team chasing up to open level. He has also been involved in show jumping and hunts on a regular basis. He is a registered, qualified saddle fitter and regularly lectures and assesses for the Society of Master Saddlers (SMS). Mark works in conjunction with the British Equestrian Federation on the World Class Programme, operating the Pliance saddle pressure system, which is jointly owned by the BEF and the SMS. He is also employed as an overseas trainer for World Horse Welfare, where he works with horses in developing countries.





## Back Biomechanics and Horse & Rider Interaction Saturday 5<sup>th</sup> August & Sunday 6<sup>th</sup> August

### Saturday

- ✓ Back function and kinematics
- ✓ The horse - the effect tack , surfaces, studs have on locomotion of the horse
- ✓ The rider – effect that the rider has on back function and locomotion
- ✓ Optimising back function with various training methods
- ✓ Use and application of training aids and ground schooling
- ✓ Demands on elite and non elite horses

### Sunday

- ✓ Subjective versus objective gait evaluation
- ✓ Importance of saddle balance
- ✓ Correcting saddle balance and reducing saddle roll
- ✓ Tips to evaluate saddle fit statically and dynamically
- ✓ Effect different seats have on rider biomechanics
- ✓ Inside the saddle – what's best?  
Practical Sessions

# Biomechanics Course Feedback

**Bridget Middlebrough** ▶ Centaur Biomechanics  
23 October · 🌐

Thank you Russell and team for a superb two days. My brain is in overload but it was probably the most informative and enjoyable two days I have experienced in years.

👍 4      1 Comment   2 shares

Like   Comment   Share

**Sam Sherrington** ▶ Centaur Biomechanics  
23 October · Holyhead · 🌐

Sitting waiting for a ferry back to Ireland, and can't wait to start putting into action some of the knowledge gained over the past 2 days, both on my own mare and clients horses! Keep up the amazing push for robust biomechanical evidence, your tireless work will undoubtedly change horses welfare!

👍 Centaur Biomechanics      1 Comment

Like   Comment   Share

**Whole Horse Therapies** at Centaur Biomechanics.  
10 July 2016 · Warwick · 🌐

Had a fabulous weekend at Centaur Biomechanics and learnt so much more about gait analysis, effects of a rider on the horse, how much horses compensate for conformational defects and how common saddle slippage is and how it affects movement. So lots to think about and to incorporate into my therapy sessions.



3 shares

Like   Comment   Share

**Catriona Goulding** Animal Physiotherapist  
feeling inspired.  
9 July 2016 · 🌐

totally inspirational and educational first day - little bit of brain ache but that was 7 hrs full of everything I am fascinated about. role on day 2 thanks centaur biomechanics.

ACPAT added 4 new photos.  
4 July 2016 · 🌐

A group of our #ACPAT members have spent the weekend at Centaur Biomechanics with Russell Guire, some of them had travelled from as far as New Zealand and Switzerland!! They had a brilliant CPD weekend discussing the biomechanics of the horse and how we can work together to improve welfare, soundness and performance. With thanks to Ben Benson Farrier and all who were involved!

#vetphysio #biomechanics #analysis #animalwelfare #performance #workingtogether #ChooseChartered



You Retweeted  
**Andrew Hoy** @HoyEventing · 26/06/2016  
@NSCsaddlesUK @CentaurBiomec Love it! Thank you for the great day, guys!

👍 2      2

**Equus First**  
8 June 2016 · 🌐

well I've had an absolutely fantastic weekend at the Centaur Biomechanics conference!!! Inspirational! Lots of new things to take home and try in training both physically and mentally! 🙌🙌

Excellent course - great course content. feel like I learned alot!  
Thankyou.

Excellent course, Russell is incredibly passionate about his work which comes across. Good group size, easy to discuss + ask questions. Thoroughly enjoyed!



# Course Summary

**Course Title:** Back Biomechanics and Horse & Rider Interaction

**Course Delivery:** Russell Guire and Mark Fisher

**Course Location:** Woolcroft Saddlery, Wisbech

**Course Fee:** £250.00 plus VAT

**Lunch:** Lunch included

**Accommodation:** Please see website or email the Centaur office

**To Book:** 4 options

- ✓ Download the booking form
- ✓ Pay via PayPal
- ✓ Call the office (+44 07788 978627)
- ✓ BACS







## To Book

- ✓ Download the booking form from the Centaur website
- ✓ Pay via PayPal (*Account not required*)
- ✓ Call the office (+44 07788 978627)
- ✓ BACS

To discuss please email [info@centaurbiomechanics.co.uk](mailto:info@centaurbiomechanics.co.uk) or  
call 07788 978627

Centaur Biomechanics Course Booking Form 2014

To register for a Centaur course being held at Centaur HQ, Warwick, please complete the booking form and return along with payment to the address at the foot of the form.

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Email: \_\_\_\_\_

2014 Courses	Price per seat	Tax
1 Day Introduction Course, 26 <sup>th</sup> March 2014	£150.00	
1 Day Introduction Course, 26 <sup>th</sup> May 2014	£150.00	
2 Day Update Biomechanics Course, 4 <sup>th</sup> - 5 <sup>th</sup> July 2014	£275.00	
2 Day Update Biomechanics Course, 4 <sup>th</sup> - 5 <sup>th</sup> July 2014 OFFSITE ONLY	£280.00	
2 Day Update Biomechanics Course, 4 <sup>th</sup> - 5 <sup>th</sup> July 2014 October 2014	£280.00	

Card Number: \_\_\_\_\_  
Card Type: \_\_\_\_\_  
Cardholder Name: \_\_\_\_\_  
Cardholder Address: \_\_\_\_\_  
Cardholder Telephone: \_\_\_\_\_  
Cardholder Email: \_\_\_\_\_  
Cardholder Postcode: \_\_\_\_\_

BACS Account No: 11110101 Sort Code: 607001 Centaur Biomechanics, 1400, Leamington Spa

Our Terms and General Conditions: [Please see Centaur Biomechanics Ltd](#)

Please return your payment along with the booking form to Centaur Biomechanics, 25 Oakton Close, Warwick, Warwick, Warwickshire, CV35 9EF or by post to the address on the form.

