



Course Title: **The Functional Foot and Ankle, Level 1**

Produced by: **Fitness Learning Systems**
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Course Type: **e-Learning Home Study**

Credit hours: AEA 3.0, ACSM 3.0, ATRI 0.3, COPS-KT 0.3, NSCA 0.3
NFPT 1.0, NCSF 1.5, YMCA 3.0, NSPA 3.0, NASM 0.3

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Dr Emily Splichal, Podiatrist and Human Movement Specialist, is the Founder of the Evidence Based Fitness Academy. With over 10 years in the fitness industry, Dr Splichal has dedicated her medical career towards studying postural alignment and human movement as it relates to foot posture and foot strength. Dr Splichal is expert lecturer and TV personality with appearances on Oprah Winfrey, The Today Show & Good Day NY. Dr Splichal is sought after for her expertise in barefoot training, foot health and postural alignment.

Degrees/Certifications: Doctor of Podiatric Medicine (DPM), Master's in Public Health (Fall Reduction), M.S. Human Movement, NASM-CPT, ACSM- Exercise Specialist

Course Summary:

The organized actions of the foot and ankle complex is often overlooked and misunderstood in the fitness industry. This adaptive lever plays a role in every upright action from human locomotion to squats and lunges. With the advancement of the fitness industry and expanding role of the fitness professional there is greater likelihood of encountering a client with foot pathology or foot compensations. To remain competitive among your colleagues and achieve the greatest results with your clients, it is imperative to gain an understanding of the role the foot and ankle play in creating and modifying fitness programs.

Objectives:

After completing this course you will:

1. Understand the complexity of the foot and ankle and why this knowledge is important for the fitness professional.

2. Learn the interconnection of the foot and ankle with the rest of the body's kinetic chain.
3. Review foot and ankle case studies in which you will be asked to identify foot type, analyze for dysfunction, and apply a corrective fitness program.
4. Learn the anatomy of the foot and ankle including osseous anatomy, joints, and muscles.
5. Identify general movement patterns for the body and specifically for the foot.
6. Explain foot types and understand how they relate to movement and pathology.
7. Practice a basic foot and ankle joint assessment.
8. List pain conditions associated with the foot.
9. Consider pathological conditions of the foot and ankle as related to training and function.

Outline:

Foot Facts

Feet and the Fitness Professional

Case Studies

Case Study 1

Case Study 2

Case Study 3

Anatomy of the Foot and Ankle

Osseous Anatomy of Foot and Ankle

The Rearfoot

The Midfoot

The Forefoot

Joints of the Foot and Ankle

Ankle Joint

Subtalar Joint

1st Metatarsal Phalangeal Joint

Muscles of the Foot and Ankle

Extrinsic Muscles of the Foot and Ankle

Anterior Muscle Group

Lateral Muscle Group

Posterior Muscle Group (Deep)

Posterior Muscle Group (Superficial)

Intrinsic Muscles of the Foot and Ankle

General Movement Principles of the Foot and Ankle

Sagittal Plane

Frontal (Coronal) Plane

Transverse (Horizontal) Plane

Triplanar Motion of the foot

Foot Types

- Neutral foot
- Pes Planus
- Pes Cavus
- Rigid vs. Flexible

Foot and Ankle Joint Assessment

- Assessment Form
- Open Chain Assessment
- Closed Chain Assessment
- Closer look at Closed Chain Assessment

Pain Conditions Associated with the Foot

- Foot Posture and Knee Pain
- Foot Posture and Low Back Pain

Limb Length Discrepancy (LLD)

Corrective Exercise for the Foot and Ankle

- Corrective Exercise for Pes Planus Foot Type
- Corrective Exercise for Pes Cavus Foot Type

Pathological Considerations

- Achilles Tendonitis
- Compartment Syndrome
- Medial Tibial Stress Syndrome
- Hallux Limitus
- Hallux Abducto Valgus (Bunion)
- Lateral Ankle Stability
- Peripheral Neuropathy
- Plantar Fasciitis
- Stress Fractures

Case Studies–Revisited

- Case Study 1
- Case Study 2
- Case Study 3

Foot and Ankle Fitness Pearls

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