# Midwestern State University EXPH 4936-5936 British Studies-Exercise Medicine: An Examination of Practices

Syllabus

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### EXPH 4936-5936 Dual Listed Class

### Purpose

To develop an appreciation and recognition of the practical skills required for utilizing Exercise Medicine as a preventative and/or therapeutic modality in health care. This course will allow students to investigate preventative health care through exercise programming in the United Kingdom. Healthcare professionals in both the UK and the US are urged to prescribe "Exercise Medicine". Thus, Exercise Physiologists are primed to play a key role in the development of exercise prescriptions for the prevention and treatment of chronic disease as well as general fitness and sport performance. Students will determine the level of exercise physiological adaptation as a medical treatment for prevention and treatment of chronic diseases.

### Rationale

By utilizing the expert resources in proximity to students in the achievement of professional competencies, the student can develop those competencies in locations not affiliated with a university for a broader perspective.

#### **Objectives/ Purposes**

- 1. To investigate preventative health care through exercise programming in the United Kingdom and determine the level of exercise physiological adaptation as a medical treatment for prevention and treatment of chronic diseases.
- 2. To investigate venues of Strength and Conditioning for athletes in the United Kingdom and note the scientific, physiological adaptations associated with these programs.
- 3. The third purpose will be to connect the first two purposes through the common thread of Exercise Physiology and Prescription/Programming. Students will show where preventative health care Exercise Prescriptions are strongly associated with Strength and Conditioning Programs established for athletic performance.
- 4. Graduate students will collect data on UK lifestyle (i.e., bicycle lanes, walking, prevalence of fitness facilities, parks) offerings compared to US and how this may influence physiological health. Additionally, students will collect data on themselves for determination of UK lifestyle and it's effect on their physiological health. This will include (but may include more) the following pre-post measures: height (cm), weight (kg), BMI (weight/height (m<sup>2</sup>), body fat (%), girth measures-waist circumference. In addition, the graduate students will maintain a food log during their time in the UK with weekly analysis of macro-nutrients (i.e., fat, protein, carbohydrate) and kilocalorie intake.

## Study Abroad: Topics for Exercise Physiology

- 1. Preventative Health Care in the United Kingdom (UK) utilizing exercise as a prescription modality
- 2. Strength & Conditioning venues at various levels of competition: collegiate, club, professional.

3. Societal differences in activities of daily living (ADL: i.e, walking, cycling, commuting, etc) and city structures that facilitate movement in the UK vs cities in the USA.

4. Nutritional aspects of society in the UK vs USA. Common foods and offerings within the UK and how those compare in nutritional-health components to the USA

5. Strength & Conditioning and the health related concepts associated with these practices. This would include how training and dietary considerations for athletes could be incorporated into clinical practices for preventative health care.

### EXPH 4936-5936 Dual Listed Class

**Objectives/ Purposes** 

**Develop a Project Paper** 

All written assignments must be typed and organized that must be submitted for the Objectives of EXPH 4936-5936 Dual Listed Class

- a. The Project Paper for EXPH 4936 will be associated with the British Studies Objectives noted above and arranged according to the following outline:
  - Title Page with Student Name
  - Table of contents
  - Introduction to the Topic Area of Study: See Purpose(s) Above
  - Research Paper Review summarizing the work established in EXPH 4936\* with supportive peer-reviewed research references.
  - Conclusion
  - UG: References (minimum 15)

b. The Project Paper for EXPH 5936 will be associated with the British Studies objectives noted above and arranged according to the following outline:

- Title Page with Student Name
- Table of contents
- Introduction to the Topic Area of Study: See Purpose(s) Above
- Methodology pertaining to the aforementioned data collection
- Results including statistical analysis of data collected
- Discussion summarizing the data collected with supportive peer-reviewed research references.
- G: References (minimum 25)

\*NOTE: Students should read and collect research/professional articles of interest to them during this course. They will serve as a resource for the student during preparation of the documents required for EXPH 4936 and EXPH 5936

Material in the aforementioned section are primary criteria from which students will be graded

## **Text Book**

Boone, Tommy (2016). ASEP's Exercise Medicine Text for Exercise Physiologists. Bentham Books Publishers. Sharjah, UAE.

#### **Student Evaluation**

Students will be scored on their submitted assignments, learning, and participation.

Student Product EXPH 4936-5936	% of Total Score	
Attendance/Involvement in <b>Topics/POGIL</b>		60%
Completion of Excel Spreadsheet noted in Objectives/Purp	oses	<u>40%</u>
	Total	100%
EXPH 4936-5936		
Project Paper as noted above		100%
	Total	100%

Grading: 90-100%=A, 80-89=B, 70-79=C, 60-69=D, <60=F

### **Faculty Expectations**

Students are expected to be motivated and independent learners who utilize site lecturers and faculty as learning resources and facilitators. A great deal of student learning at this level is self-driven, as students should be committed to the quest for advanced knowledge and achievement. The presence of the various student products in this course are not end products, they are included based on the need to assess student progress towards mastery.

### **Daily Group Work and Teaching Methodology**

Each day the students will be involved in the learning process through a group work teaching methodology referred to as POGIL. POGIL is a teaching methodology that means "Process, Oriented, Guided Inquiry, Learning". Each group will receive a worksheet to finish by the end of the class period. The worksheet, along with the instructor, guides the students to the learning outcome for that day.

NOTE: Daily attendance and being on time for class and excursions are mandatory. If you miss a class/venue meeting, you will have a course reduction of one letter grade per class/venue meeting missed. If you are tardy (i.e., late), you will have a course reduction of one letter grade per two tardy classes. The ONLY exception to the aforementioned rules is sickness needing medical attention.

Date	Subject	Speaker/Remarks	Room
11th July 10.00am - 12.00pm	Course Introduction: Syllabus, course objectives. Explanation of POGIL. Direction of course	Frank Wyatt	Arts One 3.16
2.00pm - 4.00pm	Course Introduction: Explanation of Excel Spreadsheet. POGIL exercise on Heart Disease: Diagnostic- Pharmacologic Treatment- Preventative Exercise Medicine	Frank Wyatt	Arts One 3.16
12th July 9.30am	Cycling tour of Olympic sites	Booked with Hugh Dickson (07771 602069), who will arrange the cycle hire. Meet at Pudding Mill Lane DLR station.	
3.00pm - 5.00pm	Classroom time: POGIL exercise on Cancer (lung, breast, colorectal): : Diagnostic-Pharmacologic Treatment-Preventative Exercise Medicine	Frank Wyatt	Arts One 3.16
13th July 10.00am - 12.00pm	Classroom time: POGIL exercise on Diabetes: : Diagnostic- Pharmacologic Treatment- Preventative Exercise Medicine	Frank Wyatt	Arts One 3.16
2.00pm - 3.30pm	Exercise and Sports Psychology	Dr David Nias (0207 882 7084/0798 539 0486/0208 291 0261).	Arts One 3.16
14th July 10.00am	Tour of Twickenham Rugby Stadium and Museum	Booked with Lindsay Simmons (0208 892 8877).	
2.00pm - 4.00pm	Classroom time: POGIL exercise on Respiratory Diseases: : Diagnostic- Pharmacologic Treatment- Preventative Exercise Medicine	Frank Wyatt	Arts One 3.16

### Projected Daily Schedule

18th July 10.00am - 11.30am	Visit Centre of the Cell Science Education Centre (4 Newark Street, Whitechapel) (Whitechapel tube)	Booked online (020 7882 2562). Jointly with Public Health	
2.00pm - 3.30pm	Health Issues in Britain	John Eversley (0208 980 3710) Jointly with Public Health and Sociology	Laws 209
19th July 11.00am - 12.30pm	The evolution of sports nutrition from Ancient Greece to modern times	Professor John Brewer, St Mary's University (020 8240 4390).	Arts One 3.16
2.00pm - 3.30pm	Doping in Sport - threats and challenges to sport and individuals	Professor John Brewer (020 8240 4390)	Arts One 3.16
20th July 10.00am - 12.00pm	Classroom time: POGIL exercise on ergogenic aids-Aids to Performance- nutritional, supplements, drugs. How this correlates to non-athletic individual function.	Frank Wyatt	Arts One 3.16
2.00pm	Visit Old Operating Theatre Museum and Herb Garret, including pre-anesthesia lecture (London Bridge tube)	Booked with Gareth (0207 1882 679). Jointly with Public Health	
21st - 25th July	MINI-BREAK		
26th July 10.00am	Visit St Mary's University, Twickenham (need extension to zone 4, then catch the R68 bus).	Booked with Julia Lines (020 8240 4000). Day will include talks from staff in the School of Sport, Health and Applied Science, a tour of their facilities and an interactive strength and conditioning workshop.	Students should take sports kit with them.
27th July 9.00am - 10.30am	Ethnicity and Health	Veronica White (0798 420 3150). Jointly with Public Health	Laws 209
1.00pm	Visit Institute of Sport, Exercise and Health and have lecture on 'Exercise as Medicine'	Dr Courtney Kipps (020 3447 2800).	
28th July AM	Visit Drug Control Centre at Kings College London	твс	
2.00pm	Visit Science Museum	Free, no need to book.	
1st August 10.30am - 2.30pm	Visit Surrey Human Performance Institute at the University of Surrey, for tour of facilities and 2 x Exercise Physiology Workshops	Booked with Ellie Webster (01483 683769).	Students should take sports kit with them.
2nd August 9.00am - 11.00am	Classroom time: POGIL exercise on sport performance training programs and correlates to health.	Frank Wyatt	Arts One 3.16
1.00pm	Presentation of the work of the Chelsea Foundation, followed by tour of the stadium	Booked with Gareth Davies, Senior Development Officer (02079152904)	

3rd August AM	Classroom time: POGIL exercise on environment (i.e., walking trails, exercise availability, etc.) and health as Preventative Exercise Medicine.	Frank Wyatt	Arts One 3.16
2.00pm - 4.00pm	Visit to Chartered Institute of Environmental Health	Facilitated by Tricia Keen (020 7827 5824) (Southwark tube) Jointly with Public Health	твс
4th August 10.00am - 1.00pm	Visit Wimbledon Lawn Tennis Museum and have guided tour	Booked online - contact number 020 8946 6131. Take student ID with them.	
3.00pm - 5.00pm	Course Review: Summation of Excel Spreadsheet through class group interaction	Frank Wyatt	Arts One 3.16
5th August 9.00am - 12.00pm	Final Exam: Application of diagnostic tools as preventative health care, physician prescription and Exercise Medicine as a prevention and treatment.	Frank Wyatt	Arts One 3.16