

**College of Micronesia-FSM**  
**PO Box 159**  
**Pohnpei, FM 96941**

**COURSE OUTLINE**

Mind/Body Fitness: Introduction to Yoga  
 Course Title

ESS103y Exercise Sport Science  
 Department & Number

**Course Description:**

This is a semester-long course designed to decrease stress, improve muscular endurance and increase flexibility through Yoga asanas (physical postures) and pranayamas (breath work). The course also serves to give students an appreciation of mind/body fitness, the history and philosophy of Yoga, and the role regular physical activity plays in the quality of life. Students will learn basic breathing and relaxation techniques, basic anatomy of the muscular system, and a variety of yogic postures and breathing techniques. Physical fitness levels will be measured at the beginning and end of the course, allowing students to notice the improvements regular exercise produces. Course topics also include injury prevention specific to Yoga.

**Course Prepared by:** Rachel Hollingsworth

**State** Pohnpei/National Campus

|                   | Hours per week |          | No. of week |          | Total Hours |   | Semester Credits |
|-------------------|----------------|----------|-------------|----------|-------------|---|------------------|
| <b>Lecture</b>    | _____          | <b>x</b> | _____       | <b>x</b> | _____       | = | _____            |
| <b>Laboratory</b> | <u>3</u>       | <b>x</b> | <u>16</u>   | <b>=</b> | <u>48</u>   | = | <u>1</u>         |
| <b>Workshop</b>   | _____          | <b>x</b> | _____       | <b>x</b> | _____       | = | _____            |

**Purpose of Course:**

|                    |             |
|--------------------|-------------|
| Degree Requirement | _____       |
| Degree Elective    | _____x_____ |
| Certificate        | _____       |
| Other              | _____x_____ |

**Prerequisite Courses:** None.

\_\_\_\_\_  
 Signature, Chairperson, Curriculum Committee

\_\_\_\_\_  
 Date Approved by Committee

\_\_\_\_\_  
 Signature, President, COM-FSM

\_\_\_\_\_  
 Date Approved by President

## I. **Course Objectives**

### A. **General/Program Outcomes**

1. Explain physical fitness and wellness, as well as their importance to overall health, disease prevention, and athletic performance.
2. Demonstrate the physical skills necessary to perform a variety of physical activities.
3. Design and demonstrate exercise regimes appropriate to improve health, physical fitness, and athletic performance.
4. Compare and contrast the education and skills needed to gain employment in wellness, physical education (K-12), kinesiology and coaching.
5. Describe and demonstrate beginning coaching skills.
6. Value regular physical activity and its contribution to a healthful lifestyle.

### B. **Student Learning Outcomes**

Upon successful completion of this course, the student will be able to:

1. [Core] Define the five factors of physical fitness.
2. [Core] Define mind/body fitness, and explain why yoga is a mind/body activity.
3. [Core] Define *asana* and *pranayama*.
4. [Core] Explain the importance of breath control according to yogic philosophy.
5. [Core] Describe the basic history of Yoga.
6. [Core] Identify the location of the major muscle groups on their own bodies.
7. [Core] Identify the location of the seven *chakras* on their own bodies.
8. [Core] Perform Sun Salutation without oral instruction.
9. [Core] Orally identify each of the postures in Sun Salutation.
10. [Core] Orally identify and demonstrate Warrior I, Warrior II, Triangle, and Tree poses.
11. [Core] Orally identify and demonstrate at least one pose each that is a chest opener, a hip opener, a shoulder opener, a forward bend, a back bend, a standing pose, a restorative pose, a twist, and a balance.
12. [Core] Given their pre- and post-semester measurements on resting heart rate, blood pressure, muscular endurance (via timed curl-up test and push-up test), erector spinae/hamstrings flexibility (via a sit and reach test), and percent body fat, accurately describe the changes in their fitness from the beginning of the course to the end of the course.
13. [Core] Identify the symptoms of common upper and lower body injuries, preventative measures, and basic treatment in a written format.
14. [Core] Identify diseases and illnesses inversely related to physical activity level.
15. [Core] Express how regular physical activity makes them feel (in a written, oral, or visual format).
16. [Peripheral] Demonstrate and describe modified poses that decrease injury risk.
17. [Peripheral] Describe the pranayama techniques of Bhastrika, Ujjayi, Anuloma Krama, Kapalabhati, and Nadi Shodhana breathing.
18. [Peripheral] Locate India on a world map.

## II. **Course Content**

### A. **Introduction to Exercise Science/Fitness**

- i. Five Factors of Physical Fitness
  1. Cardiovascular
  2. Muscular Strength
  3. Muscular Endurance

- 4. Flexibility
    - 5. Body Composition
  - ii. Pretests
    - 1. Heart rate
    - 2. Blood pressure
    - 3. Curl-up & Push-up tests
    - 4. Sit and reach test
      - a. (Sit and reach, curl-up and push-up instructions and norms  
<http://darkwing.uoregon.edu/~eatr/student/ft/ftmf.html>)
    - 5. Percent body fat
      - a. (Body composition norms  
<http://darkwing.uoregon.edu/~eatr/student/ft/ftbc.html>)
  - iii. Delayed Onset Muscular Soreness
- B. Philosophy of Yoga
  - i. Western thought vs. Eastern thought
  - ii. Ashtanga (eight limbs of yoga)
  - iii. Caring for the equipment
  - iv. Sun Salutation
  - v. Corpse (relaxation) pose
  - vi. Pranayama definition
    - 1. Diaphragmatic Breathing
  - vii. Journaling
- C. Safety
  - i. History of Yoga
    - 1. Bhagavad Gita
    - 2. Upanashads
  - ii. Common injuries
  - iii. Standing poses
    - 1. (e.g. Warrior I & II, Triangle Pose)
  - iv. Benefits of yoga and pranayama
  - v. Review previous concepts
- D. Philosophy of Yoga
  - i. Adapting practice to one's own belief system
  - ii. Chakras
    - 1. Crown (crown of head)
    - 2. Third eye (forehead)
    - 3. Throat
    - 4. Heart
    - 5. Navel
    - 6. Hips
    - 7. Root (tailbone)
  - iii. Mind/body fitness
  - iv. Review
- E. Muladhara Chakra (Root)
  - i. Restorative poses
    - 1. (e.g. Supported Corpse pose, Supported Child's pose, Reclining Bound Angle pose)
  - ii. Forward Bends
    - 1. (e.g. Standing forward bend, Wide-legged standing forward bend, Head to knee pose)
  - iii. 2 to 1 breathing (exhalation twice as long as inhalation)
  - iv. Review previous concepts

- F. Muladhara Chakra (Root)
  - i. History of Yoga
    - 1. Patanjali's *Yoga Sutra*
    - 2. Hatha yoga
  - ii. Anatomy of legs
    - 1. Quadriceps, Hamstrings, Gastrocnemius, Anterior Tibialis
  - iii. Review previous concepts
- G. Svadhasthana Chakra (Hips)
  - i. History of Yoga (modern)
    - 1. Yoga in the West
  - ii. Hip/groin openers
    - 1. (e.g. Cow face pose, Pigeon pose, Bound angle pose)
  - iii. Anatomy of the hips
    - 1. Gluteus maximus, Hip adductors, Hip abductors
  - iv. Review previous concepts
- H. Manipura Chakra (Navel, Solar Plexus)
  - i. Twists
    - 1. (e.g. Bharadvaja's Twist, Noose pose, Sage pose III)
  - ii. Back bends
    - 1. (e.g. Bow pose, Cobra pose, Locust pose, Camel pose)
  - iii. Anatomy of core
    - 1. Abdominals, Erector Spinae, Gluteus Maximus
  - iv. 3-part exhalation
    - 1. Inhale completely
    - 2. Exhale from throat to heart, pause
    - 3. Exhale from heart to navel, pause
    - 4. Exhale from navel to pubis, pause
    - 5. Repeat
  - v. Review previous concepts
- I. Manipura Chakra (Navel, Solar Plexus)
  - i. Balances
    - 1. (e.g. Half-Moon pose, Warrior III, Tree pose)
  - ii. Abdominal strengtheners
    - 1. (e.g. Half Boat pose, Plank pose, Four-limbed Staff pose)
  - iii. Ujjayi Breath (audible breathing through constricted glottis)
  - iv. Review previous concepts
- J. Anahata Chakra (Heart)
  - i. Chest openers
    - 1. (e.g. Extended Side Angle pose, Revolved Triangle pose, Bridge pose)
  - ii. Eagle pose
  - iii. Anatomy of the Thorax
    - 1. Pectoralis major, Deltoids, Latissimus dorsi, Trapezius/rhomboids
  - iv. Review previous concepts
- K. Visuddha Chakra (Throat)
  - i. Shoulder openers
    - 1. (e.g. Side Plank pose, Half Lord of the Fishes pose, Cow Face pose)
  - ii. Anatomy of the arms
    - 1. Biceps brachii, Triceps brachii, Forearms
  - iii. Cardiovascular disease, type II diabetes
  - iv. Segmented inhalation (Anuloma Krama)
    - 1. Exhale fully
    - 2. Inhale from pubis to navel (2-4 sec.), pause
    - 3. Inhale from navel to heart (2-4 sec.), pause

4. Inhale from sternum to throat center (2-4 sec.), pause
5. Repeat
- v. Review previous concepts
- L. Ajna Chakra (Third Eye)
  - i. Supported forward bends
  - ii. Positive Visualization
  - iii. Shining Skull (Kapalabhati) Breaths
    1. Inhale slowly
    2. Quick forceful exhalation
    3. Repeat
  - iv. Longevity, morbidity
  - v. Review previous concepts
- M. Sahasrara Chakra (Crown)
  - i. Meditation
  - ii. Nadi Shodhana Breathing
    1. Use right thumb to close right nostril, exhale, inhale
    2. Use right ring finger to close left nostril, exhale, inhale
    3. Repeat
  - iii. Stress and health
  - iv. Review previous concepts
- N. Developing a home practice
  - i. Use of journals
  - ii. Focus on difficult poses/chakras
  - iii. Bhastrika (bellows) breathing
    1. Rapidly breath in and out several times (5-10 times), engaging muscles of the core
    2. Inhale deeply and slowly
    3. Exhale deeply and slowly
    4. Cycle can be repeated with caution
  - iv. Review previous concepts
- O. Developing a home practice
  - i. Motivation
    1. Intrinsic
    2. Extrinsic
  - ii. Measuring progress
  - iii. "Feel the flame" Breathing
    1. Visualize happy memory
    2. Inhale the memory (radiating from heart center), while slowly spreading arms to head
    3. Exhale, relax arms
    4. Repeat
  - iv. Review previous concepts
- P. Fitness assessments – post-tests
  - i. Heart rate/blood pressure
  - ii. Sit and reach test
  - iii. Curl-up and push-up tests
  - iv. Percent body fat
  - v. Review

### **III. Textbooks**

This course requires no textbook.

## Required Course Materials

Exercise towel, appropriate attire (loose-fitting, comfortable clothing that allows a full range of motion around all of the joints of the body), and a bottled water. Students who come to class without water will NOT be allowed to participate in exercise.

## Reference Materials

American College of Sports Medicine. *ACSM's Guidelines for Exercise Testing and Prescription, 6<sup>th</sup> Edition*. Philadelphia, PA: Lippincott, Williams and Wilkins 2000.

American College of Sports Medicine. "ACSM Position Stand on The Recommended Quantity and Quality of Exercise for Developing and Maintaining Cardiorespiratory and Muscular Fitness, and Flexibility in Adults." *Medicine and Science in Sports and Exercise* 30(6): 975-991, 1998.

Bhavanani AB, Madanmohan, Udupa K. "Acute effect of Mukh bhastrika (a yogic bellows type breathing) on reaction time." *Indian J Physiol Pharmacol.* 47(3):297-300, 2003.

Carlson LE, Specia M, Patel KD, Goodey E. "Mindfulness-based stress reduction in relation to quality of life, mood, symptoms of stress and levels of cortisol, dehydroepiandrosterone sulfate (DHEAS) and melatonin in breast and prostate cancer outpatients." *Psychoneuroendocrinology.* 29(4): 448-74, 2004.

Gerstein, Nancy. *Guiding Yoga's light: Yoga Lessons for Yoga Teachers*. Chicago, IL. Pendragon Publishing, Inc. 2004.  
**(STRONGLY RECOMMENDED)**

Raub JA. "Psychophysiologic effects of Hatha Yoga on musculoskeletal and cardiopulmonary function: a literature review." *J Altern Complement Med.* 8(6): 797-812, 2002.

Robin, Mel. *A Physiological Handbook for Teachers of Yogasana*. Tucson, AZ. Fenestra Books, 2002.

Sainani GS. "Non-drug therapy in prevention and control of hypertension." *J Assoc Physicians India.* 51: 1001-6, 2003.

Sharkey, Brian J. *Fitness & Health: 5th Edition*. Champaign, IL: Human Kinetics 2001.

American College of Sports Medicine <http://www.acsm.org/index.asp>

International Association of Yoga Therapists <http://www.iayt.org/journal.html>

Yoga Journal online [www.yogajournal.com](http://www.yogajournal.com)

The Yoga Site: The Online Yoga Resource Center <http://www.yogasite.com/>

## Instructional Cost

20 yoga mats @\$12.09/each = \$241.80, 40 yoga blocks @\$6.04/each = \$241.60, 20 yoga straps @\$3.84/each = \$76.80 (if ordered from Gaiam at wholesale cost – contact Dena Mohr dena.mohr@gaiam.com). Plus applicable shipping and freight. Room large enough to accommodate 20 students and instructor during activities described above. Room should preferably have mirrors along one wall (to improve Kinesthetic awareness of participants), and cushioned hardwood floors. Cost for these specifications varies.

## Methods of Instruction

Demonstration, participation, lecture, individual assignments, group work. Assessment will be in the form of attendance/participation in class exercises, individual assignments, homework and quizzes given throughout the semester.

|          |           |
|----------|-----------|
| <b>A</b> | 90 – 100% |
| <b>B</b> | 80 – 89%  |
| <b>C</b> | 70 – 79%  |
| <b>D</b> | 60 – 69%  |
| <b>F</b> | 0 – 59%   |

## Evaluation

No credit by evaluation. Course is participatory.

## Attendance Policy

The College attendance policy shall be applied.

## Academic Honesty Policy

The College academic honesty policy shall be applied.

## Appendices

- A. Health History Form
  - i. All students must complete the Physical Activity Readiness Questionnaire - PAR-Q, from the Canadian Society for Exercise Physiology prior to participating in any physical activity
  - ii. Instructor may require students to provide a signed physician consent form as a pre-requisite to ESS101y.
  - iii. PAR-Q is available online and may be reproduced if used in its entirety  
[www.csep.ca/pdfs/par-q.pdf](http://www.csep.ca/pdfs/par-q.pdf)
- B. Release Form
  - i. All students must read and sign the following statement in order to participate in ESS101y:

As per College policy or as follows in the absence of such policy language:

I, \_\_\_\_\_, wish to participate in the following College of Micronesia-FSM course or program, ESS101y Introduction to Yoga, as a student. I understand that this class is a voluntary program and is not required for my graduation. I agree to abide by all safety rules and regulations in effect during this course or program.

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I wish to participate in the above-described course or program at the College of Micronesia -FSM, and agree that the College of Micronesia-FSM, and their employees are not responsible for my participation in this program, or for any injuries that may occur during my participation in this program, or by the utilization of their equipment.

Further, the instructor of this course or program in the event that he or she believes, with or without medical evidence, that I may not participate in this course or program, or that I have physical limitations that may prevent me from participating in this course or program, has absolute discretion, and may terminate my continued participation in the course or program, at any time, with or without a valid reason. However, this discretion is not an obligation of the College of Micronesia-FSM, or its employees, nor a duty, and any failure to prevent participation on my behalf, or to limit the amount of activities involved in the course or program on my behalf, does not give rise to a renunciation of or exception to this knowing and voluntary waiver.

As a result, I agree, and voluntarily assume all responsibility for my own safety and well-being, while participating in the course or program, and agree to waive any claims for liability, injury, or other damages as a result of injury or death, against the College of Micronesia-FSM or their employees. I enter into this waiver knowingly and in advance of my participation in the course or program. By signing this waiver I will forever release any future claims against the College of Micronesia-FSM and their employees, arising out of any accident, injuries, death or other damages, on behalf of myself or my heirs or dependents, due to any accident, or other mishap, including acts of god, that may arise upon my participation in the course or program.

Dated: \_\_\_\_\_ Print Name

\_\_\_\_\_ Signature



- C. Typical class structure
  - i. Two days per week
    - 1. 10 - 15 minutes travel to locker rooms, change into exercise clothes
    - 2. 5 – 10 minute warm up (low-intensity asanas, and pranayama), with verbal instruction
    - 3. 65 – 75 minutes Yoga asanas/pranayamas/instruction
    - 4. 5 – 10 minutes relaxation/corpse pose
    - 5. 10 – 15 minutes change out of exercise clothes/shower
  - ii. Three days per week
    - 1. 10 - 15 minutes travel to locker rooms, change into exercise clothes
    - 2. 5 – 10 minute warm up (low-intensity asanas, and pranayama), with verbal instruction
    - 3. 35 – 45 Yoga asanas/pranayamas/instruction
    - 4. 5 - 10 minutes relaxation/corpse pose
    - 5. 10 – 15 minutes change out of exercise clothes/shower
- D. Class enrollment limit
  - i. **No more than 20 students**
  - ii. Exceptions may be made by permission of Division Chair of Exercise Sports Science
- E. Adapted Instruction
  - i. Students who are unable to (or who should not) perform specific exercises due to injury, pregnancy, or other condition(s), will be assigned alternate exercises and/or assignments by the instructor with no detriment to final grade/status in the course
  - ii. Students who require a physician’s consent to participate in physical activity (as identified on a PAR-Q questionnaire) at term start will be required to complete physical fitness examination by a medical doctor and receive physician’s consent prior to commencing the course.
- F. Conditions and definitions
  - i. Core refers to an outcome that must be attained in order to pass the course.
  - ii. Peripheral refers to an outcome that ought to be attained but non-attainment will not cause the student to fail the course.
- G. Recommended course materials
  - i. Full-size (thick) beach towel or blanket (for pose modifications)
- H. Safety procedures
  - i. CPR certification strongly recommended for instructors of this course
  - ii. Students should be instructed on the first day of class and on their syllabi:
    - 1. STOP exercising if you experience any of the following symptoms:
      - a. Severe breathlessness
      - b. Nausea/dizziness
      - c. Extreme chest pain
      - d. Light headedness
      - e. Severe joint pain
    - 2. NOTIFY the instructor immediately. Do NOT isolate yourself by seeking privacy