



Revised: April 2021

Program.....  
Course title.....  
Course code.....

Academic degree

Higher Graduate Diploma  Doctor

Faculty / College / Institute.....

Department.....

## TQF 3 Course Specification

### Section 1 General Information

#### 1. Course Code and Title

Thai ICIR ๒๒๙ สิ่งแวดล้อมและทรัพยากรธรรมชาติในกิจการทั่วโลก

English ICIR 229 Environment and Natural Resources in Global

#### 2. Number of Credits ... 4 (4-0-8)

(Theory ..... hrs. Practice ..... hrs. Self-Study ..... hrs./week)

#### 3. Curriculum and Course Type

3.1 Curriculum Bachelor Degree Program (International)

3.2 Course Type Electives

#### 4. Course Coordinator and Lecturer

4.1 Course Responsible Lecturers: **Dr Mike Hayes – Institute for Human Rights and Peace Studies.** (66) 2-441-0813-5 michael.ger@mahidol.ac.th

#### 5. Trimester/Class Level

5.1 Trimester 1

5.2 Number of Students Allowed Approximately 40 Students

#### 6. Pre-requisite: None

#### 7. Co-requisites

None



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**8. Study Site Location Mahidol Salaya**

**9. Date of Preparation/Latest Revision of the Course Specifications**

Day..12 .....Month April Year 2022



หลักสูตร.....  
ชื่อรายวิชา.....  
รหัสวิชา.....

ระดับปริญญา  ตรี  ป.บัณฑิต  โท  ป.บัณฑิตชั้นสูง  เอก  
คณะ/วิทยาลัย.....  
ภาควิชา.....

## Section 2 Aims and Objectives

### 1. Course Goals

2. To develop a knowledge and understanding of global resource use and management within the context of the interstate system; to understand resource scarcity and the importance of collective management strategies for the benefit of the global collective.

### 2. Objectives of Course Development/Revision

#### 2.1 Course Objectives

Students will understand the availability, distribution, and uses of the world's resources: food, water, land, soil, minerals, energy, fisheries, etc. They will examine resource depletion and optimal usage as well as public policies, international agreements and business needs related to the production, distribution and exchange of resources. Students will be apprised of relevant technological and scientific developments and their impact on international relations.

#### Course Objectives:

- A. Explain from the perspective of the course responsible person on the knowledge, understanding, skills, abilities, responsibilities and characteristics of the learners that the course needs to develop in order to achieve the course goals (as specified in Item 2.1).
- B. Course Objectives may be defined in accordance with educational domains including
  - 1) Cognitive Domain: Cognitive Domain: What knowledge and understanding do the learners need?
  - 2) Affective Domain: What attitudes do the learners need?
  - 3) Social Domain [*Communication & Collaboration / Work with Team*]
    - What communication skills do the learners need?
    - What skills do the learners need to collaborate/work with other?
  - 4) Psychomotor Domain: What kinds of psychomotor skills do learners need?

#### 2.2 Course-level Learning Outcomes: CLOs

On completion of the course, the students will be able to ..... (CLOs)



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1. CLO 1 Students will possess a basic understanding of the global ecosystem the historical impact of human habitation
2. CLO 2 Students will understand the problematic relationship between development, population pressure and carrying capacity
3. CLO 3 Students will have an analytic understanding of the impact of industrial capitalism and accelerated energy use on the global environment
4. CLO 4 Students will understand the relationship between commercial agriculture, global commodities trade, shifting land tenure and food security
5. CLO 5 Students will be able to critically assess existing mechanisms for global environmental and resource management

### Section 3 Course Description and Implementation

#### 1. Course Description

(Thai) การมีอยู่ การแจกจ่ายและการใช้ประโยชน์จากทรัพยากรโลก ได้แก่ อาหาร น้ำ ที่ดิน ดิน แร่ธาตุ พลังงาน ทรัพยากรประมง ฯลฯ การลดลงของทรัพยากรและการใช้ประโยชน์สูงสุดจากทรัพยากร นโยบายสาธารณะข้อตกลงระหว่างประเทศและความต้องการทางธุรกิจที่เกี่ยวข้องกับการผลิต การกระจายและการแลกเปลี่ยนทรัพยากร การพัฒนาเทคโนโลยีและวิทยาศาสตร์ที่เกี่ยวข้อง แนวโน้มในอนาคต นักเรียนจะเข้าใจ วิเคราะห์ และประเมินสภาพแวดล้อมและผลกระทบต่อความสัมพันธ์ระหว่างประเทศ

(English) The availability, distribution and uses of the world's resources: food, water, land, soil, minerals, energy, fisheries, etc; resource depletion and optimal usage; public policies, international agreements and business needs as related to the production, distribution and exchange of resources; relevant technological and scientific developments; future prospects. Students will understand; analyse; assess the environment and its impact on international relations.

The course description should reflect the course goals, and it is a concept-based description instead of a teaching topic to facilitate the flexibility of adjusting the lesson plan to keep pace with changes.

#### 2. Number of hours per trimester

|        |          |            |
|--------|----------|------------|
| Theory | Practice | Self-study |
|--------|----------|------------|



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| (hours) | (hours) | (hours) |
|---------|---------|---------|
| 48      | 0       | 96      |

### 3. Number of Hours per Week for Individual Advice

- 4 hours/week
- Students may make appointments whenever necessary.

## Section 4: Development of the expected learning outcomes

### 1. A brief summary of the knowledge or skills expected to develop in students; the course-level expected learning outcomes (CLOs)

On completion of the course, students will be able to:

1. CLO 1 Students will possess a basic understanding of the global ecosystem the historical impact of human habitation
2. CLO 2 Students will understand the problematic relationship between development, population pressure and carrying capacity
3. CLO 3 Students will have an analytic understanding of the impact of industrial capitalism and accelerated energy use on the global environment
4. CLO 4 Students will understand the relationship between commercial agriculture, global commodities trade, shifting land tenure and food security
5. CLO 5 Students will be able to critically assess existing mechanisms for global environmental and resource management



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**2. How to organize learning experiences to develop the knowledge or skills stated in number 1 and how to measure the learning outcomes**

| CLOs | Teaching and learning experience management |            |                |            |        | Learning outcomes measurements |               |            |           |
|------|---|------------|----------------|------------|--------|--------------------------------|---------------|------------|-----------|
|      | Lecture                                     | Discussion | Legal Analysis | Case Study | Debate | Essay                          | Participation | Group work | Take Home |
| CLO1 | X   | X          |                |            | X      | X                              | X             | X          |           |
| CLO2 | X   | X          | X              | X          |        |                                | X             |            | X         |
| CLO3 | X   | X          |                | X          |        | X                              | X             |            |           |
| CLO4 | X   | X          |                |            | X      |                                | X             | X          |           |
| CLO5 | X   | X          | X              | X          | X      |                                | X             |            | X         |

**SECTION 5 LESSON PLAN AND EVALUATION**

**1. Lesson Plan**

| Week | Topic  | Number of Hours |                                 | Teaching Activities/ Media   | Lecturer |
|------|--|-----------------|---------------------------------|--|----------|
|      |  | Lecture Hours   | Lab/Field Trip/Internship Hours |  |          |
| 1    | Introduction: Course, Subject, History               | 4               | 0                               | Lecture, multimedia materials, reading assignments, small group discussion | TBA      |
| 2    | History of Industrial Capitalism and the Environment | 4               | 0                               | Lecture, multimedia materials, reading assignments, small group discussion | TBA      |



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|    |  |    |   |  |     |
|----|--|----|---|--|-----|
| 3  | Legal context to environment           | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 4  | Green Politics                         | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 5  | Energy Politics: Fossil Fuel Industry  | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 6  | Alternative Energy                     | 4  | 0 | Lecture, small group discussion  | TBA |
| 7  | Climate Change                         | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 8  | Rivers                                 | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 9  | Oceans                                 | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 10 | The politics of Food and Food Security | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 11 | Clean Air                              | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 12 | Future Scenarios Review                | 4  | 0 | Lecture, multimedia materials, reading assignments, small group discussion | TBA |
| 13 | Final Examination                      | 0  | 0 |  | TBA |
|    | Total                                  | 48 | 0 |  |     |

## 2. Plan for Assessment of Expected Course-Level Learning Outcomes (CLOs)



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## 2.1 Measurement and Evaluation of learning achievement

### A. Formative Assessment

|                     |     |
|---------------------|-----|
| 1. Participation    | 10% |
| 2. Take Home Exam   | 30% |
| 3. Presentation     | 20% |
| 4. Final Term Paper | 40% |

### B. Summative Assessment

(1) Tool and weight for measurement and evaluation

| Learning Outcomes   | Evaluation Method* |           |       |              | Weight<br>(Percentage) |
|---|--------------------|-----------|-------|--------------|------------------------|
|   | Participation      | Take Home | Essay | Presentation |                        |
| CLO 1 Students will possess a basic understanding of the global ecosystem the historical impact of human habitation |                    |           |       | 20           | 20                     |
| CLO 2 Students will understand the problematic relationship between   |                    | 20        |       |              | 20                     |





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|  |    |    |    |    |     |
|--|----|----|----|----|-----|
| development, population pressure and carrying capacity   |    |    |    |    |     |
| CLO 3 Students will have an analytic understanding of the impact of industrial capitalism and accelerated energy use on the global environment   | 10 | 10 |    |    | 20  |
| CLO 4 Students will understand the relationship between commercial agriculture, global commodities trade, shifting land tenure and food security |    |    | 10 |    | 10  |
| CLO 5 Students will be able to critically assess existing mechanisms for global environmental and resource management                            |    |    | 30 |    | 30  |
|  | 10 | 30 | 40 | 20 | 100 |
|  |    |    |    |    |     |

(2) Measurement and evaluation

**Originality and strength of argument.** The paper must contain an argument or critical point of view. Papers which are well researched but descriptive may pass, but it will not get to the B+ or A level. The argument will be your ideas and criticisms of the topic, it will be your voice. Thus the paper must have expressions of your ideas and opinions, backed up with your research and reading.

**Original research.** The student is expected to research broadly, and read the material thoroughly. Using Google alone is not enough. The student is expected to consult academic articles, books, journals or magazines, and other research resources.

A major part of the original research is to engage with the reading and research on a critical level. You cannot only read and describe, but must give the context to the work you read, and also engage critically (that is evaluate) this work.

Finally you must clearly demonstrate your research. This means the research must be presented properly by being accurately referenced so that the paper clearly displays the research you have undertaken.



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**Logical essay structure.** The term paper is in the category of an academic paper. It must conform to the standards of this genre. This means, it must have an introduction; it must give the theoretical, social, political context; it must have a conclusion. Further, the argument must be logical in its structure, and convincing in what it claims. You may need to develop counter arguments or explain contentious points of view depending on the argument you take.

**Technical proficiency** (essay format, bibliography, and referencing). While this is not a major concern, it is expected that students are professional in the presentation of their work, and that they check the spelling, grammar, referencing and page layout. At this level, students should be presenting work of a near publishable standard.

(3) Re-examination (if the course allows any.)

No

### 3. Students' Appeal

Firstly level of appeal is to the lecturer. Student can appeal in writing stating their complaints.

If there is no resolution student an appeal to director of program and request an independent evaluation.

Appeals of personal issues can be made directly to the program director.

Identify the following information: The method or channel the students will appeal to the course, the staff member who receives the appeals and processes or procedures

## Section 6 Teaching Resources

### 1. Required Texts

1. Cunningham, W.P. & Cunningham, M.A. 2012. Environmental Science: A Global Concern. 12th edition. Chapters 7, 9, 10, 17, 19, 20.
2. Diamond, J. 2005. Collapse: How Societies Choose to Fail or Survive. Prologue and chapter 16.
3. McAnany, P.A. & N. Yoffee. 2010.Questioning Collapse. Chapter 1 & chapter 13.

### 2. Suggested Materials

- 1) .....



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**3. Other Resources (if any)**

1. To keep course materials in line with current scholarship on the topics discussed in this course, a reading list with additional recommendations shall be distributed to students in the beginning of each term.



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## Section 7 Evaluation and Improvement of Course Implementation

### 1. Strategy for Course Effectiveness Evaluation by Students

- a. Student evaluations of content covered
- b. Student suggestions for improvements to the course

### 2. Strategy for Teaching Evaluation

- a. Student evaluations of content covered
- b. Student suggestions for improvements to the course

### 3. Teaching Improvement

*Updating of course material*

*Inclusion of online resources*

*Internal review*

### 4. Verification of Standard of Learning Outcome for the Course

Number of students completing

Distribution of grades

Feedback from students

.....

Describe the process used to verify student achievement in accordance with the course learning outcomes, such as the passing score test, test analysis, or assignment. The processes may be different for different courses or for different learning outcomes.

### 5. Revision Process and Improvement Plan for Course Effectiveness

- a. Student evaluations of content covered
- b. Student suggestions for improvements to the course

#### Remarks:

- a. Identify ways to gain information used as input to evaluate the course effectiveness. The information includes teaching assessment, such as data from classroom observers and a teaching team or the student's academic



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performance. Also identify the analysis methods of the input data for teaching and course management improvement.

- b. Describe mechanisms and methods to improve the course teaching and effectiveness such as an Executive Board Meeting to review and improve the course (which is reported in the TQF5 in every trimester), classroom research, and workshops for teaching improvement.



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## Appendix

### Relations between the course and the program

**Table 1** Relations between the course and the PLOs

| Course Name<br>.....   | PLOs |      |      |      |      |      |      |      |
|------------------------|------|------|------|------|------|------|------|------|
|                        | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 |
| (Course Code)<br>..... |      |      |      |      |      |      |      |      |

Remarks: Show the level of the course management with the symbols I, R, P, and M. This must correspond to the curriculum mapping written in the TQF2

**Table 2** Relations between CLOs and PLOs

| (Course Code) ..... | PLOs |      |      |      |      |      |      |      |
|---------------------|------|------|------|------|------|------|------|------|
|                     | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 |
| CLO1 .....          | 1.1  |      |      | 4.2  |      |      |      |      |
| CLO2 .....          |      |      | 3.2  |      |      |      |      |      |
| CLO3 .....          | 1.2  |      |      |      |      |      |      |      |
| CLO4 .....          | 1.4  |      |      |      |      |      | 7.3  |      |
|                     |      |      |      |      |      |      |      |      |

Remarks:



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a. Each CLO should clearly correspond to the PLO at the SubPLO level to show a clear connection.

b. Describe the PLOs and SubPLOs only referred to in the course in “Table 3 PLOs that the course is responsible for”.

**Table 3** PLOs and SubPLOs that the course is responsible for

| PLOs       | SubPLOs   |
|------------|-----------|
| PLO1 ..... | 1.1 ..... |
|            | 1.2 ..... |
|            | 1.4 ..... |
| PLO3 ..... | 3.2 ..... |
| PLO4 ..... | 4.2 ..... |
| PLO7 ..... | 7.3 ..... |