#### **Course Specification**

Name of Institution Mahidol University

Campus/faculty/department Salaya campus

Mahidol University International College

Science Division

#### **Section 1 General Information**

1. Course Code and course title

(Thai) ICBI 207 จรรยาบรรณทางการแพทย์

(English) **ICBI 207** Ethics for Biological Sciences

- 2. Number of Credits 4 (4-0-8) (Lecture/Lab/Self-study)
- 3. Curriculum and type of subject

1 Curriculum Bachelor of Science (Biological Science)

Required Course 2 Type of subject

4. Responsible faculty member

Associate Professor Chulathida Chomchai

5. Trimester / year of study  $2^{nd}$  or  $3^{rd}$  year of study  $2^{nd}$  or  $3^{rd}$  year

5.2 Number of students 5-30 students

- 6. **Pre-requisite(s)** none
- 7. Co-requisite(s) none

- **8. Venue of study** Mahidol University, Salaya campus
- **9. Date of latest revision** July 2015

#### **Section 2 Goals and Objectives**

#### 1. Goal

Students should be able to understand the foundation and theories of biomedical and health care ethics; to be able to describe definitions, codes of conducts and declarations of biomedical ethics; to be able to explain the applications of biomedical ethics; to recognize commonly encountered ethical dilemmas stemming from advances in biomedical technologies, to develop critical thinking of contemporary and controversial issues of biomedical ethics; to explore the impact of aging, health care reform and mental health; to understand legislation law and code of conducts on clinical practice, and use of human or animal in experimentation; to be able to present case studies.

#### 2. Objective of development revision

To up-date the knowledge content of the course to be more relevant

#### **Section 3 Course Management**

#### 1. Course Description

(Thai) จรรยาบรรณทางวิทยาศาสตร์ชีวภาพและการทำวิจัยทางการแพทย์ที่เกี่ยวข้องกับคนไข้หรืออาสาสมัคร การออกแบบการทดลองทางคลีนิกและภาคสนามที่เกี่ยวกับคนไข้

(English) Ethical issues in biomedical science and research involving human volunteers; design of field and clinical trials.

#### 2. Credit hours / trimester

Lecture (hours)	Additional Class (hours)	Laboratory/field trip/internship (hours)	Self-study (hours)	
48	-	-	96 hours	
(4 hours x 12 weeks)			(8 hours x 12 weeks)	

# **3.** Numbers of hours that the lecturer provides individual counseling and guidance 1 hour/week

#### **Section 4 Development of Students' Learning Outcome**

#### 1. Expected outcome on students' skill and knowledge

Student will be able to apply the knowledge from lecturer and additional research with the ideas received from analysis and synthesis to set up solutions / precautions to benefit individuals and their community.

#### 2. Teaching Methods

- Lecturing
- Self-study
- Group discussion and presentation

#### 3. Evaluation methods

#### 1. Morality and Ethics

- 1.1 Expected outcome on morality and ethics:
  - (1) To possess morality and ethics
  - (2) To have self-discipline, honesty, kindness, self- responsible and social responsibility
  - (3) To demonstrate academic ethical behavior
  - (4) To respect others' rights and be a good listener
  - (5) To respect rules and regulations
  - (6) To have good attitude toward professors/career
  - (7) To demonstrate Leadership, team player

#### 1.2 Teaching method:

Learning Centered Education: Emphasis on knowledge development, important skills in career development and living, encourage students to use their full potentials

- Lecture
- Case studies with past experiences and current events
- Emphasis on morality and ethics

- Group discussion
- Group presentation

#### 1.3 Evaluation methods:

- Written examination
- Presentation/interaction during class
- Class attendance, class participation and behavior in class

#### 2. Knowledge development

#### 2.1 Expected outcome on knowledge development:

- (1) To possess basic knowledge, theories and concepts towards the understanding of self, society, surrounding in order to be well-rounded person
- (2) To process the knowledge related to principles, theories and practice in the course
- (3) To integrate the knowledge to other related subjects
- (4) To remain current in research and new knowledge

#### 2.2 Teaching method:

Learning Centered Education: Emphasis on knowledge development, important skills in career development and living, encourage students to use their full potentials

- Lecture
- Case studies with past experiences and current events
- Emphasis on morality and ethics
- Group discussion
- Group presentation

#### 2.3 Evaluation methods:

- Written examination
- Presentation
- Class attendance, class participation and behavior in class
- On-time submission of assignments and their quality

#### 3. Intellectual development

#### 3.1 Expected outcome on intellectual development:

- (1) To have systematic and analytical thinking
- (2) To be able to search, consolidate and evaluate ideas and evidence for problem solving
- (3) To be able to apply knowledge and experience to analyze and creatively solve problems both in general and academic

#### 3.2 Teaching method:

- Lecture
- Case studies with past experiences and current events
- Group discussion
- Group assignment

#### 3.3 Evaluation methods:

- Written examination
- Presentation
- Class attendance, class participation and behavior in class
- On-time submission of assignments and their quality

#### 4. Interpersonal relationship and responsibility

#### 4.1 Expected outcome on interpersonal relationship and responsibility:

- O (1) To possess good interpersonal relationship skills (self-esteem and dignity) and have respect for the rights and value of others
- (2) To possess leadership and initiative in problem solving
- (3) To be constructive team member (in various roles) and be responsible for assignment tasks, professional and society

#### 4.2 Teaching method:

- Group discussion in case studies
- Group discussion
- Group assignment

#### 4.3 Evaluation methods:

- Presentation
- Class attendance, class participation and behavior in class
- On-time submission of assignments and their quality

# 5. Mathematical analytical thinking, communication skills and information technology skills

# 5.1 Expected outcome on mathematical analytical thinking, communication skills and information technology skills:

- O (1) To be able to select and apply appropriate statistical and mathematical methods to research problems
- O (2) To be able to apply information technology for data gathering, processing, interpreting and presenting information/results
- O (3) To have the ability to communicate effectively and select appropriate methods of presentation

#### 5.2 Teaching method:

- Lecture
- Case studies with past experiences and current events

- Group discussion
- Group assignment

### 5.3 Evaluation methods:

- Written examination
- Presentation
- Class attendance, class participation and behavior in classOn-time submission of reports and assignments and their quality

## **Section 5 Teaching and Evaluation Plans**

1. Teaching plan

methods/mulimedia  1 Introduction to medical ethics 4 Interactive lecture & Dr.		aching plan			
1 Introduction to medical ethics 4 Interactive lecture & group discussion 2 Autonomy 4 Interactive lecture & group discussion 3 Therapeutic privileges 4 Interactive lecture & group discussion 4 Non-adherence 4 Interactive lecture & group discussion 5 Euthanasia 4 6 Midterm Examination 4 7 Fetal and maternal rights 4 8 Assisted reproduction 4 Interactive lecture & group discussion 9 Preimplantation genetics 4 Interactive lecture & group discussion 10 Guest speaker 4 Interactive lecture & group discussion 11 Clinical Trials in the Developing Country 4 Interactive lecture & group discussion 12 Clinical Trials in HIV 4 Interactive lecture & group discussion 13 Final Examination 4 Interactive lecture & group discussion	week	Topics Hours Teaching		· ·	Instructor
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13 Final Examination 4 Interactive lecture & group discussion	12	Clinical Trials in HIV	4	Interactive lecture &	
group discussion				group discussion	
	13	Final Examination	4		
Total 48				group discussion	
		Total	48		

#### 2. Evaluation plan

<b>Expected outcomes</b>	Methods / activities	Week	Percentage	
1. (1) to (4)	Attendance	1-12	5	
2. (1) to (5)	Group assignment & project presentation	1-12	5	
3. (2) to (3)	Examination	13	45	
			(Midterm: 20	
			Final: 25)	

#### **Section 6 Teaching Materials and Resources**

### 1. Texts and main documents<sup>1,2</sup>

- Emanuel EJ. The Oxford Textbook of Clinical Research Ethics. Oxford: Oxford University Press; 2008.
- Herissone-Kelly P, Takala T, Ha yry M. Ethics in Biomedical Research: International Perspectives. Amsterdam: Brill Academic Publishers; 2007.

#### 2. Documents and important information

### 3. Documents and recommended information<sup>3-8</sup>

- Brezina PR, Kutteh WH. Clinical applications of preimplantation genetic testing. Vol 3502015.
- Fisher CB. HIV Prevention Research Ethics: An Introduction to the Special Issue. Journal of Empirical Research on Human Research Ethics. 2014;9(1):1-5.
- Gerrits T, Reis R, Braat DDM, Kremer JAM, Hardon AP. Bioethics in practice: Addressing ethically sensitive requests in a Dutch fertility clinic. Social Science & Medicine. 2013;98:330-339.
- Simonds RJ, Dondero TJ, DeCock KM, Gayle HD. Ethics and HIV trials. American Journal Of Public Health. 1999;89(2):255-256.
- Tai MC-T. Western or Eastern principles in globalized bioethics? An Asian perspective view. Tzu Chi Medical Journal. 2013;25(1):64-67.

• The Ethics Committee of the American Society for Reproductive M. Fertility treatment when the prognosis is very poor or futile: a committee opinion. Fertility and Sterility. 2012;98(1):e6-e9.