- PHRP7110 Bioethics: Principles of Life Science Research Course Director: Dr. Robert Speth, Email: <u>rs1251@nova.edu</u>; Office 954-262-1330, Cell 662-291-2014 3 Credit Hour - Graded Course

Meeting Time: Tuesdays 9:10 AM-Noon Room: 2124 Assembly I

# Classes begin Tuesday August 20, 2024

**Required Text:** Scientific Integrity Fourth Edition, Francis Macrina ASM Press, Washington, DC, 2014

### **Course Description**

This course consists of facilitated discussions of the topics in the syllabus. Students are assigned to be discussion facilitators for each topic. In addition to the text material in the relevant chapters in the book, discussions will focus on 2 or 3 of the cases provided in each chapter. In addition, supplementary materials of current interest pertinent to the weekly topics will also be discussed. For many classes guest facilitators with specific expertise in the topic areas will also participate. Student facilitators will be responsible for preparing a synopsis of the discussion for distribution to the class and for grading purposes.

# **Course Objectives**

- 1. Students are expected to gain an appreciation for the rules, customs and etiquette of Life Sciences Research and the reasons for abiding to them.
- 2. Students are also expected to develop and apply critical thinking skills to the problems discussed in the course and to evaluation of contemporary biomedical literature.
- 3. Students should instill these skills into their approach to the conduct of biomedical research so as to be able to use them in dealing with the lifelong moral, ethical and strategic challenges they will face in their careers as Life Science Researchers.
- 4. Students should gain experience in developing presentations to fellow students and faculty audiences that will give them skills to be effective communicators.

#### **Office Hours**

There are no set office hours, however, I am generally available throughout the day up until 6 or 7 PM for drop-in visits at Terry Building Room 1348A. If I am away from my office, you may contact me via email or cell phone, text or voice, (662) 291-2014.

### **Disability Accommodations**

Reasonable accommodations are available for students who have a documented disability. It is the student's responsibility to initiate the process to obtain disability services. Students approved for accommodations under the Americans with Disability Act (ADA) should have completed the required forms and received accommodation approval from the HPD Student Disability Coordinator Ms. Susan Gonzalez at <a href="mailto:susagonz@nova.edu">susagonz@nova.edu</a>. Information and forms are available at <a href="http://www.nova.edu/disabilityservices/studentinfo.html">http://www.nova.edu/disabilityservices/studentinfo.html</a>.

### **Course participation guidelines**

In accordance with accepted principles of academic integrity, students are reminded that cheating in any form in this course will not be tolerated. Students determined by the instructor to have cheated will receive a zero grade for affected assignments or exam and may be subject to additional disciplinary penalties. Performance on all tests and assignments shall represent the individual work of the student unless specified otherwise by the course director. It is the responsibility of the student to obtain the course director's permission if they wish to use outside assistance on individual assignments. The use of generative artificial intelligence (AI) resources, e.g. ChatGPT, Bard, or other AI programs to produce submitted assignments is prohibited unless approved by Dr. Speth. If approval is received to use AI generated text in an assignment, it must be placed in quotation marks, citing the AI source, with the question that was used to solicit the AI generated text. Students will be held responsible for inaccuracies of the AI generated text in their assignments as if they themselves wrote the inaccurate information. Moreover, AI generated text in an assignment must be justified by additional commentary or editing of the AI generated text. The AI generated text is limited to less than 25% of the assignment or test.

# **Grading Criteria**

Grading will be 30% based on the discussion facilitation of one of the modules; 10% based upon special book review or biographical reviews of noted biomedical researchers platform presentations, plus a formal write-up, 30% based on participation in class discussions, 15% based upon successful completion of the CITI responsible conduct of research program and 15% integration of knowledge gained from the course material on a final exam. A scale of A (92.5-100%), A- 89.5 -92.49%, B+ 86.5 - 89.49%, B 82.5-86.49%, B- 79.5-82.49% C+ 76.5 - 79.49%. C 72.5-76.49% C-69.5-72.49, and F (<69.5%) will be used. (Two points will be deducted from the final grade for each unexcused absence.

The rubric for grading presentations is Accuracy of the information presented 10 points

# Updated 8/12/24

Quality of the graphics used for the presentation (or ability to adequately present information without the use of graphics 10 points

Ability to engage class participation in the presentation 10 points

book review platform presentation 5 points

Written book review 5 points

The rubric for grading of class participation is participation in discussions of each topic each day this can include asking questions, expressing opinions, sharing insights 2 points per class

Course schedule is subject to change based on scheduling and availability of guest facilitators.

#### PHRP7110 Fall 2024

**Bioethics: Principles of Life Science Research** 

Course Director: Robert Speth, Ph.D. rs1251@nova.edu; 954-262-1330; (662) 291-

2014

Course Faculty and Facilitators (subject to change based on scheduling demands): Keri Baker, Scholarly Communications Librarian, Alvin Sherman Library kbaker1@nova.edu; Paul Bianco, J.D., Partner, Fleit Gibbons Gutman Bongini & Bianco PL; pbianco@fleitip.com; Alexander Bontempo, Ph.D., Assistant Professor, Dental Medicine; Stephen Carlisle, Copyright Officer, Nova Southeastern University; scarlisle@nova.edu; Paul DeMuro, PhD, JD, MBA, CPA, Senior Counsel for the national healthcare law firm of Epstein Becker and Green PDeMuro@ebglaw.com; Richard Finkel, PharmD. Clinical Assistant Professor Emeritus, College of Pharmacy, rfinkel14@gmail.com; Irvin Harrell, M.A., B.S.J., Assistant Director of Public Relations, NSU; Eric Mason, Ph.D., Associate Professor, Dept. Writing and Communication, ericmaso@nova.edu; Janice Roldan, MBA, Research Compliance Manager, janice.roldan@nova.edu; Dominique Quimet, Vivarium Core Supervisor, douimet@nova.edu; William Smith, J.D., Director, Institutional Review Board, wsmith2@nova.edu; M.D., J.D.Professor of Surgery, College of Medicine, Former Chair Institutional Review Board, davithom@nova.edu; Lynn Wecker, Ph.D. Distinguished Professor Emerita at USF Morsani College of Medicine, Past-President, American Society for Pharmacology and Experimental Therapeutics (ASPET), lwecker@usf.edu; Beth Welmaker, Director, Environmental Health & Safety ewelmaker@nova.edu; Jeremy Weissman, Ph.D., Assistant Professor, Department of Humanities and Politics, jweissm1@nova.edu

#### 3 Credit hour Graded Course

**Required Text**: Scientific Integrity Fourth Edition, Francis Macrina ASM Press, Washington, DC, 2014

### **Supplementary Readings:**

On Being a Scientist, Third Edition, National Academy Press, Washington, DC 2009. http://www.nap.edu/catalog.php?record\_id=12192#toc

Selected biographies of biomedical researchers, ethical treatises and provocative descriptions of biomedical research endeavors.

CITI training modules in the Responsible Conduct of Research Contemporary articles of interest to course topics Proposed course outline (order of presentation and Facilitators may be changed)

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Contemporary Topics	Week	Date	Topic	Resources and Facilitators
Contemporary Topics   2   8/27	1	8/20	Introductory meeting	Dr. Speth
Section			Contemporary Topics	_
Life in Academia   Dr. Lynn Wecker	2	8/27		Dr. Speth
Solution   Science   In Public and Electronic   Forums/Ethical Logic   Dr. Speth   Dr. Speth			l ————————————————————————————————————	
Forums/Ethical Logic  9/10	3	9/3	Communication of Science	
4 9/10 Integrity in Science Philosophy of Science Artificial Intelligence  5 9/17 Intellectual Property Issues  6 9/24 The Use of Animals in Research  7 10/1 Collaborative Research  8 10/8 Conflict of Interest  9 10/15 Laboratory Notebooks  Lab Safety  10 10/22 Mentoring, Careers in Pharmaceutical Industry  11 10/29 The Use of Humans in Research and Clinical Applications of Therapy  12 11/5 Implications of Genetic Technology  13 11/12 Authorship  14 11/19 Peer review  15 11/26 Contemporary issues in Life Science research  Paul Bianco, J.D.  Dr. Jeremy Weissman Chapter 1&2 Text  Paul Bianco, J.D. Stephen Carlisle, J.D. Chapter 9 Text  Dominique Ouimet Dominique Ouimet Dr. Alexander Bontempo Chapter 6 text  Dr. Speth, Dr. Paul DeMuro Chapter 8 Text  Ms. Beth Welmaker Ch 10 Text Dr. Peter Bonate Dr. Richard Finkel Dr. Speth Chapter 3 Text  Dr. Dave Thomas William Smith, J.D. Chapter 5 text Chapter 11 Text Dr. Speth Chapter 4			In Public and Electronic	Irvin Harrell
4 9/10 Integrity in Science Philosophy of Science Artificial Intelligence  5 9/17 Intellectual Property Issues  6 9/24 The Use of Animals in Research  7 10/1 Collaborative Research 8 10/8 Conflict of Interest 9 10/15 Laboratory Notebooks Lab Safety 10 10/22 Mentoring, Careers in Pharmaceutical Industry 11 10/29 The Use of Humans in Research and Clinical Applications of Therapy 12 11/5 Implications of Genetic Technology 13 11/12 Authorship 14 11/19 Peer review 15 11/26 Contemporary issues in Life Science research Paul Bianco, J.D. Stephen Carlisle, J.D. Chapter 1 & 2 Text Dominique Ouimet Dominique Ouimet Dominique Ouimet Dominique Ouimet Dominique Ouimet Dominique Ouimet Dor. Alexander Bontempo Chapter 6 text Dr. Speth, Dr. Paul DeMuro Chapter 8 Text Ms. Janice Roldan Chapter 7 Text Ms. Beth Welmaker Ch 10 Text Dr. Peter Bonate Dr. Richard Finkel Dr. Speth Chapter 3 Text Dr. Dave Thomas William Smith, J.D. Chapter 5 text Chapter 11 Text Dr. Speth Chapter 4			Forums/Ethical Logic	Dr. Speth
Philosophy of Science Artificial Intelligence  5 9/17 Intellectual Property Issues  6 9/24 The Use of Animals in Research  7 10/1 Collaborative Research  8 10/8 Conflict of Interest  9 10/15 Laboratory Notebooks Lab Safety  10 10/22 Mentoring, Careers in Pharmaceutical Industry  11 10/29 The Use of Humans in Research and Clinical Applications of Therapy  12 11/5 Implications of Genetic Technology  13 11/12 Authorship  14 11/19 Peer review  Paul Bianco, J.D. Stephen Carlise, J.D. Chapter 1&2 Text  Paul Bianco, J.D. Stephen Carlise, J.D. Chapter 9 Text  Dominique Ouimet  Dominique Ouimet  Dr. Alexander Bontempo Chapter 6 text  Dr. Speth, Dr. Paul DeMuro Chapter 8 Text  Ms. Janice Roldan Chapter 7 Text  Ms. Beth Welmaker Ch 10 Text  Dr. Peter Bonate Dr. Richard Finkel Dr. Speth Chapter 3 Text  Dr. Dave Thomas William Smith, J.D. Chapter 5 text  Chapter 11 Text Dr. Speth Chapter 1 Text Dr. Speth Chapter 4	4	9/10	_	Dr. Speth
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15 11/26 Contemporary issues in Life Science research Book Reviews				Chapter 4
Life Science research Book Reviews	14	11/19	Peer review	Dr. Speth Chapter 4
Book Reviews	15	11/26	Contemporary issues in	Dr. Speth
			Life Science research	
16 TBD Final Exam			Book Reviews	
	16	TBD	Final Exam	

Week	Date	Торіс	Student/Faculty Facilitators
1	8/20	Introductory meeting Contemporary Topics	Dr. Speth
2	8/27	On Being a Scientist Life in Academia	Dr. Speth Dr. Lynn Wecker
3	9/3	Communication of Science In Public and Electronic Forums/Ethical Logic	Dr. Speth Dr. Eric Mason
4	9/10	Integrity in Science	Daniel Lopez
5	9/17	Intellectual Property Issues	Haylie Pomroy
6	9/24	The Use of Animals in Research	Helen Aba Crentsil
7	10/1	Collaborative Research	Andres Moas
8	10/8	Conflict of Interest	Ziyad Almatruk
9	10/15	Laboratory Notebooks	Jade Elizabeth Smith
10	10/22	Mentoring, Careers in Pharmaceutical Industry	Abdullah Althaiban
11	10/29	The Use of Humans in Research and Clinical Applications of Therapy	Ali Alqasem Anali Aliakbari
12	11/5	Implications of Genetic Technology	Muath Abdulrahman
13	11/12	Authorship	Rawan Alkhamisi
14	11/19	Peer review	Waleed Alassaf
15	11/26	Contemporary issues in Life Science research Book Reviews	Dr. Speth
16	TBD	Final Exam	

Presentation grading breakdown: 30 pts facilitation w/ handout, 10 pts book report oral and paper. Class participation: 30 points, Final exam: 15 points CITI training and 15 points for written exam.

Book					
Bad Blood by James Jones					
Bad Blood by John Carreyrou					
Bottle of Lies					
Why Animal Experimentation					
Matters					
The Immortal Life of Henrietta					
Lacks					
One in a Billion					
The Origin of Aids					
Mercies in Disguise					
Rigor Mortis					
Rosalind Franklin The Dark					
Lady of DNA					
The Double Helix					
Bad Science					
Serendipity in Science					
The Nobel Duel					
The Philadelphia Chromosome					
The Autobiography of a					
Transgender Scientist					
Barbara McClintock Biography,					
A Feeling for the Organism					
White Coat, Black Hat					
Silent Partners					
Deadly Choices					
Bad Advice					
Do You Believe in Magic					
Pandora's Lab					

# Updated 8/12/24

Rosalind Franklin The Dark				
Lady of DNA				
Flu				
The Inheritance				
Suffer the Children: The Story of				
Thalidomide				
The Disordered Mind				
Bad Pharma				