COURSE SYLLABUS AND ASSESSMENT TOOLS
Last Update: August 10, 2012

FST 302
FOOD REGULATION

Department of Food Science and Technology
Bogor Agricultural University
COURSE SYLLABUS AND ASSESSMENT TOOLS
FST302 FOOD REGULATION

Credit: 2(2-0)
(2 hours lectures and group presentation, 14 weeks; no laboratory work)

Semester: 5 or 7
Academic Year: 2011/2012
Pre-requisite: -
Number of students: 110, divided into two parallel classes of 60 students per class
Course Coordinator: Dr. Feri Kusnandar
Contact: 62-251-8624546; 0813-10053018
Lecturers:
Parallel Class 1:
1. Dr. Feri Kusnandar (fkusnandar@ipb.ac.id)
2. Dr. Yadi Haryadi (yadi_h@hotmail.com)
3. Prof. Dr. Dedi Fardiaz (d_fardiaz@hotmail.com)
Parallel Class 2:
1. Dr. Nuri Andarwulan (nuri@seafast.org)
2. Ir. Darwin Kadarisman, MS (foodtech@indo.net.id)
3. Prof. Dr. M.A. Wirakartakusumah (m_wira@yahoo.com)

Day and Time: Tuesday, 01.00-02.40 pm
Classrooms: RK Seafast Center/PAU

I. Course Description
This course discusses the major legislation related to foods and its role in food industry and trade, regulatory rule making at national and international level, agencies that have regulatory authority, regulations that control the processing, packaging, labeling and distribution of foods, including aspects of safety and nutritive value, food safety management system and food inspection system in Indonesia, food category system issued by Codex Alimentarius Commission (CAC) and that of adopted in Indonesia, and principle of halal food production system according to Islam law and how it is incorporated in food regulation. The case study on the implementation of food regulation is also discussed.

II. General Learning Outcomes
By the end of this course, students are expected to have learned the role of national and international food legislation to ensure the safety, halalness and wholesomeness of the food supply, create honest and responsible food trade, and protect consumers and
producers. In relation to designed core competencies recommended in IFT education standard, students are expected to have learned:

1. regulations related to the safety assurance of food production.
2. application and incorporation of food regulation in practical, real-world situations and problems.
3. awareness of current topics especially related to food regulations of importance to the food industry.
4. government regulations required for the manufacture and sale of food products.

This course also contributes to the development of student’s success skills, especially in written and oral communication skills, critical thinking/problem solving skills, professionalism skills, life-long learning skills, interaction skills, information acquisition skills, and organization skills.

III. Specific Learning Outcomes

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

1. compare the legislation hierarchy related to foods (act, directive, law, ordinance, regulation, rule, statute and standard) and describe their role to the insurance of food safety, prevention of economic fraud and protection of consumers and producers (C4, analysis).
2. compare legislations, standard and code of practices related to foods in national and international level (C4, analysis).
3. describe the procedure to evaluate and issue a food regulation, standard and code of practices in national and international level and government agencies or organization that have regulatory authority (C2, comprehension).
4. describe regulations related to food safety management system and food inspection system in Indonesia (C2, comprehension).
5. describe the principles of “halal food” (permitted food) and “haram food” (prohibited food) according to Islamic law and its incorporation in national food legislation (C2. Comprehension).
6. describe the principles of halal food production system for specific products and its critical control point (C2, comprehension).
7. describe the procedure of food recalling according to government regulation (C2, comprehension).
8. evaluate and critique the implementation of food regulations to current practices by food producers (C6, evaluation).

IV. References and Lecture Notes

A. Major References/Textbooks


B. Lecture Notes

Lecture notes in the form of print out power point presentation is available for each topic.

C. Other Sources

Students are recommended to access additional information from the websites of CAC, JECFA, NADFC and other relevant pages.

V. Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Sub-topics</th>
<th>Class A (PAU)</th>
<th>Class B (SEAFAST)</th>
</tr>
</thead>
</table>
| 1    | Course introduction; Food regulation: hierarchy and its importance | • The importance of food regulation  
• The role of food regulation to food safety insurance, consumers and producers protection and economic fraud prevention.  
• Hierarchy of government regulation related to foods in Indonesia | FKU | NAN |
| 2    | Government agencies that have regulatory authority in Indonesia and procedure to evaluate and issue food regulation | • Government agencies that have authority to issue food regulation to control their implementation  
• Procedure to issue food regulation and standard in Indonesia | DFA | MAW |
| 3    | International agencies that have authority in food regulation and standard | • Codex Alimentarius Commission (CAC) and its role  
• JECFA and its role  
• The procedure to release international food standards by CAC and JECFA and how they are adopted in Indonesia  
• Agencies in other countries related to food regulation and controlling  
• International standard: General Standard of Food Additive (GSFA) issued by CAC, international numbering system (INS) of food additive issued by JECFA | DFA | MAW |
| 4,5  | Major national regulations related to foods | • Food Act (7/1996)  
• Consumer Protection Act (8/1999),  
• Food Safety, Quality and Nutrition Regulation (28/2004) | YHA | DKA |
| 6    | Major national regulations related to foods | • Food Labelling and Advertisement Regulation (69/1999)  
• Food Labelling Guideline (BPOM-RI HK.00.05.52.4321)  
• Nutritional Labelling | YHA | DKA |
<p>| 7    | Scientific review of food labelling | Scientific review of food labelling | FKU | NAN |</p>
<table>
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<th>Week</th>
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<th>Sub-topics</th>
<th>Class A (PAU)</th>
<th>Class B (SEAFAST)</th>
</tr>
</thead>
</table>
| 8    | Integrated food inspection system in Indonesia | • The principle of integrated food inspection system and its implementation  
• Food inspection system in Indonesia according to PP no. 28/2004 | DFA | MAW |
| 9    | Food safety management system | • Understanding the principles of food safety management system  
• The principle of risk assessment, risk management and risk communication | DFA | MAW |
| 10   | The importance of halal foods in global market, principle of halal foods and regulation | • The importance of halal foods in global market  
• Current challenge and problems related to halal foods  
• Definition and scope of halal and haram according to Islamic law | FKU | NAN |
| 11   | The halalness of selected food ingredients and additives | • The use of pork and its derivates in food production  
• The halalness of biotechnology products  
• The use of alcohol and its derivates in food production  
• The halalness of fats/oils and their critical point  
• The halalness of food additive and ingredients and their critical point  
• Animal slaughtering principle according to Islamic law  
• Halal certification process and halal assurance system  
• Halal certification/labeling process and authorized agency  
• Halal Assurance System | FKU | NAN |
| 12   | Food adulteration and product recalling | Regulation related to food adulteration and food recalling in Indonesia and other countries | YHA | DKA |

Note: Paralel Class 1: FKU (Feri Kusnandar); YHA (Yadi Haryadi); DFU (Dedi Fardiaz)  
Paralel Class 2: NAN (Nuri Andarwulan); MAW (M. Aman Wirakartakusumah); DKA (Darwin Kadarisman)

**VI. Potential Course Overlap**

You will find some deliberately controlled overlapping topics with other courses, such as topics on food regulation and standard in relation to food additive and functional foods (FST410 Food Additives and FST441 Functional Foods). You will also practice to design a food label and use it for packaging of food products (Food Processing Laboratory (FST334) and Integrated Food Processing Laboratory (FST400)).
VII. Lecture Rules
1. Make sure that you arrive to the class on time. Students arriving later than 15 minutes after the beginning of the class are not allowed to attend the class. You are considered absent.
2. Switch off your cellular phone. Communication (receiving or calling of telephone/SMS) is prohibited during class periods.
3. Remember that a minimum 80% of class attendance is compulsory to allow you to take a final examination. Exception will be made for certain justifiable conditions.

VIII. Assessment Tools
A. Written Examinations
1. You will have two written examinations: Middle and final examinations. Check your exam schedule on the announcement board. The middle and final examinations will cover course materials delivered in week 1-7 and 8-12, respectively. Remember that they are close book examinations.
2. There will be some models of written examination at different cognitive levels (50 multiple choice questions and 2-3 essays). Some questions (15-20%) will be presented in English. You can answer essay questions in “Bahasa Indonesia” or English. Time allocation for each examination is 90 minutes.
3. The score for each question will be shown in paper sheets. Total scores: 100.
4. Remember that dishonesty or cheating during examination will result in cancellation of your course. Obtaining or receiving illegal assistance from other student’s work/lecture notes/textbook/other information sources and accessing unauthorized information about an examination before hand are categorized as cheatings. Disciplinary actions will be imposed if a student is found to have seriously violated any of the rules contained in the Code of Conduct: warning, reduction of grades, suspension or expulsion.
5. Your scores will be posted on announcement board soon after exam papers are graded. You may verify your scores to the lecturers.

B. Group Assignment: Paper and Oral Presentation
1. The objective of a group assignment is to help you make connections between a real case with the existing food regulations.
2. The class will be divided into 14 groups consisting of 5-6 students per group. You can discuss by yourselves to determine members of your group.
3. Each group is required to search a case regarding deception to food legislations, especially Food Act 7/1996, Consumer Protection Act 8/1999, Food Labeling and Advertisement Regulation (69/1999) and Food Labelling Guideline (BPOM-RI HK.00.05. 52.4321). A deception case can be collected from any information sources (newspaper, internet, magazine, direct observation in markets, etc).
4. Each group will present orally the findings in front of class in order that other students can learn from you and give a necessary comment or questions. Each group will present for 10 minutes (including discussion session). Oral presentation is conducted in week 13 and 14. There is no presentation schedule available and group presenter will be selected randomly. Make sure that your power point presentation is always in your hand. A student as a group representative will present orally. Other students are encouraged to participate to give questions or comment during the discussion session.

5. Your group presentation will be graded according to the following criteria (maximum score: 100): (1) clarity and accuracy of information delivered during oral presentation (40%); (2) ability to answer the questions during discussion session (40%); and (3) presentation technique (20%). The following rubric is used as a guideline to grade your oral presentation. Score will vary from 60-100 depending on the fulfillment of the criteria.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Excellent (90-100)</th>
<th>Limited (60-70)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity and accuracy of information delivered during oral presentation</td>
<td>Information is delivered clearly, strong background and relevant cited references, strong explanation or discussion, clear and correct conclusion/recommendation, precise choice of word(s)</td>
<td>Information of the case is not clear, a lot of missing or inaccurate information, inaccurate citation, source of information is not clear, no clear or irrelevant conclusion or recommendation, inappropriate use of word(s)</td>
</tr>
<tr>
<td>Ability to answer the questions during discussion session</td>
<td>Clear and correct explanation with strong rational argument with the support of relevant cited references</td>
<td>Unclear and irrational explanation, fail to answer the questions, comment is not taken seriously</td>
</tr>
<tr>
<td>Power point quality</td>
<td>Power point presentation is very clear, systematic, free of word error, excellent appearance, not wordy, free of plagiarism.</td>
<td>Power point presentation is not clear, a lot of word error is found, very wordy, no illustration, not well prepared, unoriginal use of information.</td>
</tr>
<tr>
<td>Presentation technique and communication with audience</td>
<td>On time presentation, excellent interaction with audience (such as body language supports the delivery of presentation materials), loud and clear pronunciation, self confident, empathic towards audience in answering questions.</td>
<td>Longer presentation than allocated time, no interaction or empathy with audience, unclear pronunciation, loss of orientation, no self confidence or over confident.</td>
</tr>
</tbody>
</table>
6. Each group is required to write up 3-4 pages of review paper regarding the description case that has been presented orally. Your paper must contain the following information:

(1) **Title page**: Put a title of your paper on the top of a new page, name and IDs of your group members, and name of course and code.

(2) **Description of case study**: A short statement or paragraph stating the case that you select and the objectives sought. Show any evidence if necessary.

(3) **Identification of articles cited from food regulations**: Identify relevant articles in food regulations to the case and penalties should be taken to violators according to the regulation.

(4) **Recommendation/conclusion**: State your recommendation or conclusion to the case.

(5) **Cited references**: List all cited references in alphabetical order by following a journal citation guidelines.

7. Writing format: A4 paper, single space, times new roman 12, paper margin (3 cm top, bottom, right; 4 cm left), soft cover, two copies.

8. The due date of paper submission is at week 14 during course period of the semester. Failure to meet the identified deadline will result in 10% reduction of your score.

9. Zero grade will be given to any plagiare. Plagiarism includes any work copied in whole or in part from another individual’s work.

10. The paper is graded based on the following criteria (maximum score for each criteria: 100): (1) writing format (20%), (2) clarity and accuracy of case study description (25%), (3) identified relevant articles in cited food regulation (25%); (4) recommendation/conclusion (20%), and (5) cited references (10%). Remarked paper will be returned as a feedback.

11. The following rubric is used as a guideline to grade your paper. Score will vary from 60-100 depending on the fulfillment of the criteria.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Excellent (90-100)</th>
<th>Limited (60-69)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall writing format</td>
<td>Sentences vary in length and well formed, word choice is consistently precise, writing is free of error, and writing format obeys the writing guideline, free of plagiarisms or other inappropriate use of information.</td>
<td>Paragraph is poorly constructed and disorganized; full of plagiarisms; frequent typographic error</td>
</tr>
<tr>
<td>Logical framework</td>
<td>Flow of thinking is clearly reflected in the paper or report. There is clear link between subsequent parts of the paper.</td>
<td>No clear connection between subsequent parts of the paper.</td>
</tr>
</tbody>
</table>
Critically analyze data or information. Clear presentation of figures, tables, flowchart, appendices where applicable, inclusion of statistical significance of data, and presentation of data, discussing a critical analysis of results and comprehension of subject area; clear explanation of why results occurred the way they did and good explanation of anomalies and similarities. A lot of missing and incomplete information in data presentation; data is not well analyzed and discussed.

Citation and references:
- Citation of all literature referred to in the report, meet the guideline, used many, varied, and up to date sources.
- Use inadequate number, inappropriate, or out of date references; inconsistent use of citation system.

IX. Grading Scale (Number of Points)

<table>
<thead>
<tr>
<th>Assessment Tools</th>
<th>% of Grade</th>
<th>Maximum Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm written examination</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>Final written examination</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>Paper (Group)</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Oral presentation (Group)</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td><strong>Maximum Score</strong></td>
<td></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Final grade classification:
- A ≥ 80; AB: 75-79; B: 70-75; BC: 65-69; C: 55-64; D: 45-54; E< 45
### Assessment Tools to Measure the Achievement of IFT Core Competencies in Food Regulation Course (FST 302)

<table>
<thead>
<tr>
<th>Code</th>
<th>IFT Core Competencies</th>
<th>Topics Covered in this Course</th>
<th>Cognitive Levels</th>
<th>Assessment Tools</th>
</tr>
</thead>
</table>
| III.B.2. | understand the principles that make a food product safe for consumption (cover in some extent) | • The role of food regulation, standard and code of factices to ensure the food safety, consumers and producers protection and economic fraud prevention  
• The role food safety management system to protect consumers and producers | C1-C6 | Written examinations (middle/final examination) |
| IV.A.1. | be able to apply and incorporate the principles of Food Science in practical, real-world situations and problems (cover in some extent) | Incorporation of food science in the risk assessment of food colorants and halal food production: a case study | C3-C6 | • Written examinations (middle/final examination)  
• Paper assignment and oral presentation |
| IV.F.1. | be aware of current topics of importance to the food industry (cover in some extent) | Trends in food regulation nationally and internationally, either related to food safety, food quality and food halalness | C1-C6 | • Written examinations (middle/final examination)  
• Paper assignment and oral presentation |
| IV.G.1. | understand government regulations required for the manufacture and sale of food products (cover in detail) | • The role of food regulation, standard, code of practice and the implementation in the manufacture of food products  
• The role of regulatory body nationally and internationally to release food regulation and controlling their implementation | C1-C6 | • Written examinations (middle/final examination)  
• Paper assignment and oral presentation |
<p>| V.A.1. | demonstrate the use | A case study: evaluation of | | Paper assignment and |</p>
<table>
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</thead>
<tbody>
<tr>
<td></td>
<td>of oral and written communication skills (cover in detail)</td>
<td>current practices and problems in food production chain and how its relevancy to existing food regulations</td>
<td></td>
<td>oral presentation</td>
</tr>
<tr>
<td>V.B.1</td>
<td>define a problem, identify potential causes and possible solutions, and make thoughtful recommendations (cover in detail)</td>
<td>Define a problem, identify potential causes and possible solutions, and make thoughtful recommendations related to food regulation</td>
<td>C5-C6</td>
<td>Paper assignment and oral presentation</td>
</tr>
<tr>
<td>V.B.2</td>
<td>apply critical thinking skills to new situations (cover in detail)</td>
<td>A case study: evaluation of current practices and problems in food production chain and how its relevancy to existing food regulations</td>
<td>C5-C6</td>
<td>Paper assignment and oral presentation</td>
</tr>
<tr>
<td>V.C.1</td>
<td>commit to the highest standards of professional integrity and ethical values (cover in detail)</td>
<td>A case study: evaluation of current practices and problems in food production chain and how its relevancy to existing food regulations</td>
<td></td>
<td>Paper assignment and oral presentation</td>
</tr>
<tr>
<td>V.C.2</td>
<td>work and/or interact with individuals from diverse cultures (cover in detail)</td>
<td></td>
<td></td>
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<tr>
<td>V.D.1</td>
<td>explain the skills necessary to continually educate oneself (cover in some extent)</td>
<td></td>
<td></td>
<td>Paper assignment and oral presentation</td>
</tr>
<tr>
<td>V.E.1</td>
<td>work effectively with others (cover in detail)</td>
<td>A case study: evaluation of current practices and problems in food production chain and how its relevancy to existing food regulations</td>
<td></td>
<td>Paper assignment and oral presentation</td>
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<tr>
<td>V.E.2</td>
<td>provide leadership in a variety of situations (cover in some extent)</td>
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<td>V.E.3</td>
<td>deal with individual and/or group conflict (cover in detail)</td>
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<tr>
<td>V.F.1</td>
<td>independently research scientific and non-scientific information</td>
<td>A case study: evaluation of current practices and problems in food production chain and how its relevancy to existing food regulations</td>
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<tr>
<td>V.F.2</td>
<td>competently use library resources (cover in detail)</td>
<td>to existing food regulations</td>
<td></td>
<td>Paper assignment and oral presentation</td>
</tr>
<tr>
<td>V.G.1</td>
<td>manage time effectively (cover in detail)</td>
<td>A case study: evaluation of current practices and problems in food production chain and how its relevancy to existing food regulations</td>
<td></td>
<td>Paper assignment and oral presentation</td>
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<tr>
<td>V.G.2</td>
<td>facilitate group projects (cover in detail)</td>
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<td></td>
<td></td>
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<tr>
<td>V.G.3</td>
<td>handle multiple tasks and pressures (cover in some extent)</td>
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</table>