



**EUROPEAN ASSOCIATION FOR INTEGRATING FOOD SCIENCE AND
ENGINEERING KNOWLEDGE INTO THE FOOD CHAIN (ISEKI-FOOD)**

registered at Bundespolizeidirektion Wien: ZVR 541528038

1. Formal Data

Name of the short course (language of the economic region)	ข้อกำหนดและมาตรฐานสำหรับเครื่องดื่ม
Name of the short course (English)	Regulations and Standards for Beverages
Contact person - E-mail - Telephone number - Fax	<ul style="list-style-type: none"> • Assistant Professor Dr.Kriskamol Na Jom • kriskamol.n@ku.ac.th • Tel. +66-2562-5020 ext.5219 Fax. +66-2562-5021
Web address (of the course provider)	https://www.sea-abt.eu/ http://agro.ku.ac.th/department.php?dep_id=3
Start date of short course	June 2019
Length of course (days/hours)	2 days
Fees / charges to delegates	52.50 Euro (2,000 Baht)

2. Comment on the quality of the course design: Are the rationale of the programme (section 2) and the educational process (section 3) aligned? Are the resources (section 4) adequate to the educational process?

Reviewer 1

The program's rationale and the educational process are well aligned. However, adding a section on regulations and standard related to halal, kosher, and/or vegan might help strengthen the course. Concerning the resources, adding a lecturer or panel from National Bureau of Agricultural Commodity and Food Standards, who also takes part for setting standards and aligning the Thai standards with the international standards, will help fulfill the course.

Reviewer 2

I consider that the rationale of the programme and the educational process are not aligned because the skills and program outcomes as described in sections 2 and 3 result too difficult to achieve based on the lessons, I have serious doubt that students will be able to "Understand both domestic and international laws and regulations..." rather than "Apply knowledge of relation while developing new beverage products or seeking

the approval of new beverage products”... The resources can be considered adequate to the educational process if they will present some case studies on the topic reported in the program.

3. Comment on the relevance of the quality assurance system (section 5) and additional information provided (section 6).

Reviewer 1

The quality assurance system is well established and is aligned with standard evaluation methods used in academia. Internal and external bodies that help in the design as well as the quality control of the course should be identified and their role should be elaborated.

Reviewer 2

I do not understand how the on-line test will be carried out, I need further information on such aspect.

I agree with the sentence reported in section 6 “However, some more issues of international law and regulation related to beverage products should be added to the content.”

I expect that confusing or incomplete parts of the attached lessons to be completed or modified.

4. Recommendations (certify or not and suggestions of improvement).

Reviewer 1

I would recommend that the course be certified. However, standards and regulation issues related to, for example, halal, kosher, and/or vegan, should be added to improve the course.

Reviewer 2

I do not suggest to certify the course in its present form but I suggest some improvement of the material attached to the program. Some aspects should be better clarified, e.g. Codex Alimentarius standards and rules are on a voluntary basis for most countries worldwide even if they are internationally recognized. The sub-regulations of FSMA are more than 7... in general I noticed that some confusing parts are present in lessons. I specify that I did not go in detail with food legislation other than EU law and for the later, some parts of the following lessons should be changed.

1) Lesson named “Interlaw”

The Council is part of the ordinary legislative procedure and therefore it should be added to Commission and Parliament as EU Institutions making laws. For the exercise of implementing powers conferred on the Commission there is also the assistance of an advisory committee composed of the representatives of the Member States and chaired by the representative of the Commission.

I do not understand the non-alert notification, please delete.

According to Regulation 16/2011/EU notifications are classified as follows:

- (a) original notification
 - (i) alert notification;
 - (ii) information notification for follow-up;
 - (iii) information notification for attention;
 - (iv) border rejection notifications;
- (b) follow-up notification

As reported by Regulation 178/2002/EC, “Food and feed imported into the Community for placing on the market within the Community shall comply with the relevant requirements of food law or conditions recognised by the Community to be at least equivalent thereto or, where a specific agreement exists between

the Community and the exporting country, with requirements contained therein". Even if the Community and Member States promote consistency between international technical standards and food law they must continue to ensure that the high level of protection adopted in the Community is not reduced.

The controls on imported foods are well detailed in Regulation 882/2004/EC. Commission experts may carry out official controls in third countries in order to verify the compliance or equivalence of third-country legislation and systems with Community feed and food law and Community animal health legislation. If, during a Community control, a serious risk to human or animal health is identified, the Commission shall immediately take any necessary emergency measures in accordance with Article 53 of Regulation (EC) No 178/2002 or safeguard provisions in other relevant Community legislation.

So, I do not understand the sentence "EFSA and FVO will randomly inspect" (please delete).

2) EU regulations and standards for fruit juice and beverages

Council Directive 2001/112/EC was amended by further directives and/or regulations, some of them modified important topic of this law. I suggest to put in evidence the importance to update food legislation. The amendments to the above mentioned Directive are:

- Council Regulation (EC) No 1182/2007 of 26 September 2007
- Regulation (EC) No 1332/2008 of the European Parliament and of the Council of 16 December 2008
- Commission Directive 2009/106/EC of 14 August 2009
- Directive 2012/12/EU of the European Parliament and of the Council of 19 April 2012
- Commission Delegated Regulation (EU) No 1040/2014 of 25 July 2014

I do not understand the main purpose of this lesson. I consider more important to highlight the principle of food safety rather than food quality and trade purpose. But I found no reference to this aspect in the lesson. As reported by Directive 2012/12/EU "The products defined in Annex I are subject to provisions of Union law applicable to food, such as Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, unless this Directive provides otherwise".

There are many amendments established by Directive 2012/12/EU, some examples are:

- For products manufactured from two or more fruits, except where lemon and/or lime juice are used under the conditions laid down in point 2 of Part II of Annex I, the product name shall be composed of a list of the fruits used, in descending order of the volume of the fruit juices or purées included, as indicated in the list of ingredients. However, in the case of products manufactured from three or more fruits, the indication of the fruits used may be replaced by the words 'several fruits' or a similar wording, or by the number of fruits used.
- The labelling of concentrated fruit juice referred to in point 2 of Part I of Annex I, not intended for delivery to the final consumer, shall bear a reference indicating the presence and quantity of added lemon juice, lime juice or acidifying agents permitted by Regulation (EC) No 1333/2008 of the European Parliament and of the Council of 16 December 2008 on food additives. This reference shall appear on one of the following:
 - on the packaging,
 - on a label attached to the packaging, or
 - on an accompanying document.
- This Directive shall apply to the products defined in Annex I which are placed on the market within the Union in accordance with Regulation (EC) No 178/2002.
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- In order to bring the Annexes to this Directive into line with developments in relevant international standards and to take into account technical progress, the Commission shall be empowered to adopt

delegated acts in accordance with Article 7a to amend the Annexes to this Directive, with the exception of Part I of Annex I, and of Annex II.

- Authorised ingredients
- Only the following ingredients may be added to the products referred to in Part I:
 - Vitamins and minerals as authorised in Regulation (EC) No 1925/2006 of the European Parliament and of the Council of 20 December 2006 on the addition of vitamins and minerals and of certain other substances to foods;
 - Food additives authorised in accordance with Regulation (EC) No 1333/2008; and in addition:
 - For fruit juice, fruit juices from concentrate and concentrated fruit juices: restored flavour, pulp and cells;
 - For grape juice: restored salts of tartaric acids;
 - For fruit nectars: restored flavour, pulp and cells; sugars and/or honey up to 20 % of the total weight of the finished products; and/or sweeteners;

A claim stating that sugars have not been added to fruit nectar, and any claim likely to have the same meaning for the consumer, may only be made where the product does not contain any added mono- or disaccharides or any other food used for its sweetening properties, including sweeteners as defined in Regulation (EC) No 1333/2008. If sugars are naturally present in fruit nectar, the following indication should also appear on the label: 'contains naturally occurring sugars'.

Authorised treatments and substances

Only the following treatments may be applied and only the following substances may be added to the products referred to in Part I:

- Mechanical extraction processes;
- The usual physical processes, including in-line water extraction (diffusion) of the edible part of fruits other than grapes for the manufacture of concentrated fruit juices, provided that the fruit juices thus obtained comply with point 1 of Part I;
- For grape juice, where sulphitation with sulphur dioxide of the grapes has been used, desulphitation by physical means is authorised, provided that the total quantity of SO₂ present in the final product does not exceed 10 mg/l;
- Enzyme preparations: pectinases (for breakdown of pectin), proteinases (for breakdown of proteins) and amylases (for breakdown of starch) meeting the requirements of Regulation (EC) No 1332/2008 of the European Parliament and of the Council of 16 December 2008 on food enzymes (1);
- Edible gelatine;
- Tannins;
- Silica sol;
- Charcoal;
- Nitrogen;
- Bentonite as an adsorbent clay;
- Chemically inert filtration aids and precipitation agents (including perlite, washed diatomite, cellulose, insoluble polyamide, polyvinylpyrrolidone, polystyrene), which comply with Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food (2);
- Chemically inert adsorption aids which comply with Regulation (EC) No 1935/2004, and which are used to reduce the limonoid and naringin content of citrus juice without significantly affecting the limonoid glucosides, acid, sugars (including oligosaccharides) or mineral content.

Finally, I do not understand why no regulations and/or international standards regarding alcoholic or soft drinks were reported in such course on beverages. For instance, COMMISSION REGULATION (EU) No 1129/2011 of 11 November 2011 amending Annex II to Regulation (EC) No 1333/2008 of the European

Parliament and of the Council by establishing a Union list of food additives (beverages included) as well as other rules set by International Organizations for these categories could be interesting to be considered in the course. Hygiene and safety objectives should be also implemented.