Graduate Certificate
Food Fraud Prevention

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<tr>
<th>Semester</th>
<th>Course Title (Course Number)</th>
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<tr>
<td>Summer:</td>
<td>Anti-Counterfeit and Product Protection (VM/PKG/ CJ 840)</td>
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<tr>
<td>Fall:</td>
<td>Quantifying Food Risks (VM 825)</td>
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<tr>
<td>Spring:</td>
<td>Food Protection and Defense (VM/ CJ 821) Recommended</td>
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<tr>
<td>Summer:</td>
<td>Packaging for Food Safety (VM/PKG 814)</td>
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Note: With approval and successful admission, these 12 credits can be applied toward the 30 credit online Master of Science in Food Safety

Graduate Certificate Overview:
The Food Fraud Initiative (FFI) within the Master of Science in Food Safety Program and the College of Veterinary Medicine at Michigan State University is proud to offer this Graduate Certificate in Food Fraud Prevention (GCFF). The courses are offered to graduate students at MSU and to continuing education students. ('Lifelong Education students' include working professionals not enrolled in a graduate program.) The Certificate program is led by, and the three core classes taught by, FFI Director Dr. John Spink.

A specialty Graduate Certificate is a demonstration of familiarity with a concept at a higher level (beyond unstructured learning.) The effort of pursuing the certificate also demonstrates a student’s willingness to make extra effort in contributing to their organization and in continuing to gain knowledge.

To obtain the certificate, students must successfully complete the three core course noted above (840, 825 and 814) plus one additional elective. Possible electives include:

- VM/CJ 821 Food Protection and Defense, Fall and Spring -- Recommended
- HM 833 Introduction to Pharmaceutical Counterfeiting and Public Health, Fall of odd years
- VM 890 Independent Study -- this is an optional course to conduct a specific research project
- Other MSU courses may be applicable with advanced approval

This is currently a non-transcriptable, Type 3, graduate certificate offered through the Master of Science in Food Safety program and College of Veterinary Medicines. This includes recognized, for-credit graduate courses that are administered under the Food Safety Program. Pending successful admission these credits can be applied toward a formal MSU Master of Science in Food Safety “MS” degree. (A non-transcriptable certificate is not listed on a MSU transcript.)

The recommended resume or Curriculum Vita (CV) entry is:
Graduate Certificate in Food Fraud Prevention, Food Fraud Initiative, College of Veterinary Medicine, Michigan State University, Fall <YEAR>

Registration Process:
1. Registration: Contact the Program Leader, Dr. Spink, spinkj@msu.edu, 517-381-4491
2. Complete application to become a Lifelong student at http://www.reg.msu.edu/ROInfo/EnrReg/LifelongEducation.asp. Support for Food Safety Lifelong Education can be found through the Food Safety Program advisors at info@online.foodsafety.msu.edu
3. Register for classes at: https://www.reg.msu.edu/ROInfo/Enrollment.aspx or 517-355-3300
4. Note: Subject to change, at the current rate of $895 per credit hour, one class costs $2685 and the 4 course certificate is ~$10,740. See: http://www.ctlr.msu.edu/COSTudentAccounts/Tuition_FeesNonResident_SummerGrad.aspx

Program Leader
John Spink, PhD
Director and Assistant Professor, Food Fraud Initiative, College of Veterinary Medicine, MSU
Affiliations:
Member, Food Fraud Think Tank, GFSI
Advisor, Economic Adulteration of Food Project, GMA
Chair, US Technical Advisory Group to ISO Technical Committee 247 Fraud Counter-measures and Controls
Member, 3 USP Expert Panels: Food, Drug, Dietary Supplements
Member, State of Michigan’s Ag & Food Protection Strategy Steering Committee
Testified, FDA Open Meeting on Economically Motivated Adulteration, May 1, 2009

With:
Douglas C Moyer, PhD
Assistant Professor Counterfeit Medicines Program in Public Health College of Human Medicines, MSU

Contact:
Dr. John Spink
spinkj@msu.edu
517-381-4491
www.FoodFraudPrevention.com
**Detail of Overall Key Learning Objectives:**

The Graduate Certificate in Food Fraud Prevention is designed to provide a multi-disciplinary foundation that includes application to current compliance and management needs.

Key learning objectives:

1. Establish a foundation of Food Fraud Prevention.
2. Understand the Food Fraud Prevention Cycle that includes interdisciplinary concepts from Food Science, Supply Chain Management, Food Law, Criminology, Consumer Behavior, Risk Analysis/Decision-Sciences, Business/Enterprise Risk Management, and others.
3. Provide the understanding and awareness of the ‘fraud opportunity’ to create, implement, manage or evaluate a Food Fraud Prevention Strategy.

The Graduate Certificate includes three required courses and one elective.

**Detail of Specific Graduate Course Key Learning Objectives:**

The three core classes – and the recommended options – were developed to provide a structured, in-depth foundation for specific important topics. Through the courses the broad range of Food Fraud prevention concepts are covered, as well as assessments and assignments to create a structured program.

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<tr>
<th>Graduate Course</th>
<th>Key Learning Objectives</th>
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| Anti-Counterfeit and Product Protection      | 1. Understand the underlying ‘fraud opportunity’ for food and all products  
2. Understand the broad food fraud, product fraud, and product protection concepts including a focus on anti-counterfeiting  
3. Become familiar with the regulatory and standards requirements.                                                                                                      | Taught by the same professor since 2008, this course is tri-listed in the Food Safety Program, School of Packaging, and the School of Criminal Justice. The interdisciplinary student teams provide a broad perspective and challenge traditional thinking. |
| (VM/PKG/CJ 840)                              |                                                                                                                                                                                                                         |                                                                                                                                                                                                       |
| Quantifying Food Risk                        | 1. Understand enterprise-wide risk assessment theory and models including Enterprise Risk Management (ERM/ COSO)  
2. Consider an overall food risk by evaluating specifically food quality, food safety, food fraud, and food defense.  
3. Conduct a project to present the findings in a format for senior management.                                                                                      | Taught by the same professor since 2011, this course provides an overarching method to organize all food risks including food quality, food safety, food fraud, and food defense. |
| (VM 825)                                     |                                                                                                                                                                                                                         |                                                                                                                                                                                                       |
| Packaging for Food Safety                    | 1. Understand the overall interaction and opportunities to reduce food safety and food fraud threats.  
2. Understand basic package and packaging concepts especially in relation to food safety.  
3. Understand the operations and manufacturing processes and challenges.                                                                                             | Taught by the same professor since 2003, this course is co-listed with the School of Packaging. The broad food safety and product protection concepts provide insight to the opportunities and challenges of the package and packaging. |
| (VM/PKG 814)                                 |                                                                                                                                                                                                                         |                                                                                                                                                                                                       |
| Food Protection and Defense (Recommended)    | 1. Understand the overall Food Defense concept (intentional act with the intent to harm)  
2. Examine a broad range of issues “from farm to fork.”  
3. Assess how Food Defense countermeasures and control systems help reduce the ‘fraud opportunity.’                                                                 | This is taught by a range of instructors who provide expertise on the specific modules in the course. The packaging module has been taught by the same professor team since 2004 and the course is co-listed in the School of Criminal Justice. |
| (VM/CJ 821)                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                       |

Note [1]: Co-listing – or cross listing – means that a course is offered under two or more departments. This is also referred to as co-listed between two degree-granting programs or tri-listed between three degree-granting programs. For example, the academic home for the “Anti-Counterfeit and Product Protection” course is Veterinary Medicine, abbreviated as VM840. It is also reviewed and approved as meeting the requirements for the School of Criminal Justice as CJ840, and also the School of Packaging as PKG840. Some degree programs require a set number of elective credit hours in their program (e.g., the School of Packaging might require six credits of PKG electives) and then 6 credits of free electives (e.g., any course from any other MSU department). Students enroll in the VM course and then their advisor processes the change on the transcript.