

# MICHIGAN STATE UNIVERSITY

August 22, 2014

## MEMORANDUM

TO: Dr. Douglas Estry, Associate Provost for Undergraduate Education  
and Dean of Undergraduate Studies

FROM: Dr. John Gaboury, Associate Provost for Academic Services

RE: Request to Change the Admission Requirement and the List of Courses  
Which Currently Require a Grade of 2.0 in Each Course

For Transmittal to the University Committee on Undergraduate  
Education (UCUE)

The request referenced above is being sent to the University Committee on Undergraduate Education (UCUE) in accordance with the *Bylaws for Academic Governance*, 4.4.

### UCUE Response Requested:

Please ask the UCUE to consider the request referenced above and provide consultative commentary prior to the October 23, 2014 Full Committee, UCC meeting. Please mail the related materials referenced under the heading Attachments at the end of this memorandum to the UCUE members.

The academic program and course requests referenced above will be included on the agenda for the October 9, 2014 meeting of Subcommittee A, University Committee on Curriculum (UCC). Requests that are approved by Subcommittee A on October 9 will be before the Full Committee, UCC, for action on October 23, 2014. Requests that are approved by the Full Committee on October 23 will be included in the November 11, 2014, Report of the UCC to the Faculty Senate.

If you have any questions, please call Joy Speas, University Curriculum Administrator at 5-8420.

Thank you for your help.

### Attachments:

1. Request for Changes in an Academic Program form dated April 27, 2014: Bachelor of Science Degree in Packaging and attachments.



## University Curriculum and Catalog

Hannah Admin. Building  
426 Auditorium Road  
Room 151  
East Lansing, MI 48824

517-355-8420  
Fax: 517-353-1935

**COLLEGE OF AGRICULTURE AND NATURAL RESOURCES**

1. Request to change the requirements for the **Bachelor of Science** degree in **Packaging** in the School of Packaging. The University Committee on Undergraduate Education (UCUE) will consider this request.
  - a. Under the heading **Admission as a Junior** make the following change in item 2.:
    - (1) Change item b. to 'Mathematics 133'.
  - b. Under the heading **Requirements for the Bachelor of Science Degree in Packaging** make the following changes:
    - (1) In item 3. a. make the following changes:
      - (a) Change the total credits from '50' to '57'.
      - (b) Add the following courses:

MTH	132	Calculus I	3
MTH	133	Calculus II	4
    - (2) Delete item 3. c.
    - (3) Reletter items 3. d., 3. e., and 3. f. to items 3. c., 3. d., and 3. e. respectively.
    - (4) In item 3. d. make the following changes:
      - (a) Change the total credits from '9 or 10' to '9'.
      - (b) Change the credits of ADV 205 from '4' to '3'.

Effective Spring 2015.

<b>View a Program</b>		<b>Main Menu</b>
Joy Speas, RO	Tuesday, 4/29/2014	
<b>Program Name: Packaging</b> <b>Degree: BS Sequence Number: 7</b>	Program Request ID: 2659	
<b>Effective Dates: Fall 2014 - Open Status: Interim Initial Action: Change</b>		
<b>Requested Date: 3/18/2014 11:38:02 AM</b>		
<p><b>1. Department/School/College:</b> 02634 .... School of Packaging</p> <p><b>2. Name of Program:</b> Packaging</p> <p><b>3. Name of Degree:</b> BS</p> <p><b>4. Type of Program:</b> Major</p> <p><b>5. Effective Start Semester:</b> <del>Fall 2014</del> <i>Spring 2015</i></p> <p><b>6. Target student audience for the program:</b> Undergraduate Packaging BS candidates</p> <p><b>7. Enrollment:</b> <b>What is the expected enrollment per year:</b> 500 <b>What is the minimum enrollment acceptable:</b> 450</p> <p><b>8. Source of budget for the program:</b> To align academic planning and curricular change, ALL requests for NEW funds must be included in the College's annual planning letter. Provost approval of new funds and the effective date for the new program must align. If funding is not approved, then the program request will not be forwarded to Faculty Senate.  Internal reallocation  If new funds, was this request included in the College's annual planning letter? Indicate yes or no. If no, then this is a department or college fund reallocation (If the program is implemented, no additional resources are required.).</p> <p><b>9. Projected Costs as compared to other programs in unit:</b> Same</p> <p><b>10. Staff requirement:</b> How many additional staff will be required: 0  Who will provide the primary instruction. Describe any external linkages(industry,</p>		

government, etc.):  
PKG faculty

**11. Will additional equipment be required:**

Approximate cost: 0

Source of funding:

**12. Will additional library materials be required:**

Approximate cost: 0

Source of funding: NA

**13. Will additional space be required:**

Type:

Approximate amount: NA

**14. If the program requirements contain a named concentration, do you wish for the concentration to be noted on the student's transcript?:**

No

**15. Detailed Description:**

**College of Agriculture and Natural Resources  
School of Packaging  
Undergraduate Programs  
Packaging**

The School of Packaging offers a program of instruction leading to the Bachelor of Science degree. The program combines basic principles of physics, chemistry, mathematics, and materials science with a cognate in business to prepare students for rewarding careers in the manufactured products industries. Career opportunities are plentiful since some form of packaging is involved in the production and movement to market of nearly every item of consumption in today's economy. In addition to careers in companies that use packaging, attractive opportunities are also available in the package supply industries. Package supplier industries include companies that print and convert paper and flexible plastic materials as well as manufacturers of such diverse items as bottles, cans, folding cartons, corrugated boxes, drums, wooden containers, pallets, pails, tubes, vials, and jars. Packaging impacts most functions in manufacturing firms so graduates may work in package development, production, quality control, research, sales, purchasing, marketing, testing, distribution, or technical services.

In its flexibility, the program allows students to leverage their personal skills and interests and to make individualized choices. Elective courses provide for broad, general preparation or for focused study in food packaging, medical packaging, pharmaceutical packaging, automotive packaging, distribution, robotics, and other areas.

**Admission as a Junior**

Enrollments in the School of Packaging are limited. To be considered for admission to the major, the student must have:

1. Completed at least 56 credits.
2. Completed the following courses with a minimum grade of 2.0 in each course:
  - a. Chemistry 141.
  - b. Mathematics ~~124 or 132~~ 133.
  - c. Physics 231.

The student's cumulative grade-point average for all courses completed is considered in the admission decision. Factors such as work experience, personal experience, and diversity may also be considered.

For additional information about admissions criteria and procedures, students should contact the School of Packaging.

### **Requirements for the Bachelor of Science Degree in Packaging**

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Packaging.

The University's Tier II writing requirement for the Packaging major is met by completing Packaging 315 and 485. Those courses are referenced in item 3. a. below.

Students who are enrolled in the Packaging major leading to the Bachelor of Science degree in the School of Packaging may complete an alternative track to Integrative Studies in Biological and Physical Sciences that consists of the following courses: Chemistry 141, 143 and 161; Biological Science 161; or Food Science 342 or Microbiology and Molecular Genetics 201. The completion of Chemistry 143 and 161 satisfies the laboratory requirement. Chemistry 141, 143 and 161; Biological Science 161; Food Science 342 or Microbiology and Molecular Genetics 201 may be counted toward both the alternative track and the requirements for the major referenced in item 3. below.

The completion of the College of Agriculture and Natural Resources mathematics requirement may also satisfy the University mathematics requirement.

2. The requirements of the College of Agriculture and Natural Resources for the Bachelor of Science degree.

Certain courses referenced in requirement 3. below may be counted toward College requirements as appropriate.

3. The following requirements for the major:

- a. All of the following courses (50 ~~56~~<sup>57</sup> credits):
- ACC 230 Survey of Accounting Concepts
  - CEM 141 General Chemistry
  - CEM 143 Survey of Organic Chemistry
  - CEM 161 Chemistry Laboratory I
  - MTH 132 Calculus I
  - MTH 133 Calculus II 4
  - PKG 101 Principles of Packaging
  - PKG 221 Packaging with Glass and Metal
  - PKG 315 Packaging Decision Systems (W)
  - PKG 322 Packaging with Paper and Paperboard
  - PKG 323 Packaging with Plastics
  - PKG 410 Distribution Packaging Dynamics
  - PKG 411 Package Development Technology
  - PKG 432 Packaging Processes
  - PKG 485 Packaging Development (W)
  - PHY 231 Introductory Physics I
  - PHY 232 Introductory Physics II
- b. One of the following courses (3 credits):
- BS 161 Cell and Molecular Biology
  - FSC 342 Food Safety and Hazard Analysis Critical Control Point Program
  - MMG 201 Fundamentals of Microbiology
- ~~c. One of the following courses (3 credits):~~
- ~~- MTH 124 Survey of Calculus I~~
  - ~~- MTH 132 Calculus I -~~
- d. One of the following courses (3 or 4 credits):
- STT 200 Statistical Methods
  - STT 201 Statistical Methods
  - STT 315 Introduction to Probability and Statistics for Business
- e. Three of the following courses (9 ~~or 10~~ credits).
- ADV 205 Principles of Advertising
  - FI 320 Introduction to Finance
  - GBL 323 Introduction to Business Law
  - MGT 325 Management Skills and Processes
  - MKT 327 Introduction to Marketing
  - SCM 303 Introduction to Supply Chain Management
- f. Nine additional credits in Packaging courses excluding Packaging 490 and 492. Up to three credits in a packaging internship completed under Packaging 493 and up to 3 credits in a packaging overseas study program completed under Packaging 491 may be counted toward this requirement.

**16. Are there admissions requirements for this program?:**

Grade or grade-point average requirements and if so in which course(s), portfolio requirement, audition, essay, etc. If there are not admission requirements other than those required by the University policy indicate "none".

Admission as a Junior Enrollments in the School of Packaging are limited. To be considered for admission to the major, the student must have: 1. Completed at least 56 credits. 2. Completed the following courses with a minimum grade of 2.0 in each course: a. Chemistry 141. b. Mathematics 133 or higher. c. Physics 231 The student's cumulative grade-point average for all courses completed is considered in the admission decision. Factors such as work experience, personal experience, and diversity may also be considered.

**17. Type(s) of change(s):**

Increase in mathematics requirement

**18. Students who will be affected by the proposed changes:**

Students declaring a packaging major or major preference Fall 2014 or later

**19. Will the proposed change(s) have a negative impact on students? If so, which ones?:**

Will not impact current packaging majors

Describe impact and explain what accommodations will be made:

**20. Reason(s) for change(s):**

Packaging as a field is becoming more technical, so students will benefit from increased math skills.

**DEPARTMENT LEVEL APPROVAL STATUS**

Approved: School of Packaging  
4/11/2014 2:34:47 PM by Sue Selke for Joseph H. Hotchkiss, Director

**SIGNOFFS STATUS**

No Response by: Eli Broad College of Business and The Eli Broad Graduate School of Management

Signed Off: Department of Accounting and Information Systems  
4/11/2014 3:23:47 PM by Lynn Zelenski for Vallabh Sambamurthy, Chairperson

Signed Off: Department of Advertising and Public Relations  
4/11/2014 2:46:33 PM by Linda Good for Jeffrey I. Richards, Chairperson

No Response by: Department of Biochemistry and Molecular Biology

Signed Off: Biological Science Program  
4/15/2014 10:25:39 AM by John Merrill for Gerard Mark Voit, Associate Dean

Signed Off: Department of Chemistry  
4/11/2014 2:40:16 PM by Lynmarie Posey for John McCracken, Chairperson

Comments: No changes to CEM course requirements.

No Response by: Department of Finance

Signed Off: Department of Food Science and Human Nutrition  
4/15/2014 1:12:33 PM by Gale Strasburg for Frederik Derksen, Chairperson

Signed Off: Department of Management  
4/16/2014 10:51:30 AM by Robert Wiseman for Robert M. Wiseman, Chairperson

Signed Off: Department of Marketing  
4/14/2014 11:08:12 AM by Forrest Carter for R. Dale Wilson, Chairperson

Signed Off: Department of Mathematics  
4/11/2014 2:37:45 PM by Pavel Sikorskii for Yang Wang, Chairperson

Signed Off: Department of Physics and Astronomy  
4/12/2014 7:00:07 AM by Scott Pratt for Phillip M. Duxbury, Chairperson

Signed Off: Department of Statistics and Probability  
4/11/2014 2:45:40 PM by Yimin Xiao for Hira L. Koul, Chairperson

No Response by: Department of Supply Chain Management

#### **COLLEGE LEVEL APPROVAL STATUS**

Approved: College of Agriculture and Natural Resources  
4/27/2014 8:23:10 AM by Kelly Millenbah for Kelly Millenbah, Associate Dean

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## UNDERGRADUATE PROGRAMS

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In its flexibility, the program allows students to leverage their personal skills and interests and to make individualized choices. Elective courses provide for broad, general preparation or for focused study in food packaging, medical packaging, pharmaceutical packaging, automotive packaging, distribution, robotics, and other areas.

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  - c. Physics 231.

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2. The requirements of the College of Agriculture and Natural Resources for the Bachelor of Science degree.

Certain courses referenced in requirement 3. below may be counted toward College requirements as appropriate.

3. The following requirements for the major:

	CREDITS
a. All of the following courses: . . . . .	<del>50</del> <u>57</u>
ACC 230 Survey of Accounting Concepts . . . . .	3
CEM 141 General Chemistry . . . . .	4
CEM 143 Survey of Organic Chemistry . . . . .	4
<del>CEM 161 Chemistry Laboratory I . . . . .</del>	<del>1</del>
PKG 101 Principles of Packaging . . . . .	3
PKG 221 Packaging with Glass and Metal . . . . .	3

~~\_\_\_\_\_~~ MTH 132 Calculus I      3  
 MTH 133 Calculus II      4

	PKG 315	Packaging Decision Systems (W)	3	
	PKG 322	Packaging with Paper and Paperboard	4	
	PKG 323	Packaging with Plastics	4	
	PKG 410	Distribution Packaging Dynamics	4	
	PKG 411	Package Development Technology	3	
	PKG 432	Packaging Processes	4	
	PKG 485	Packaging Development (W)	4	
	PHY 231	Introductory Physics I	3	
	PHY 232	Introductory Physics II	3	
b.	One of the following courses:		3	
	BS 161	Cell and Molecular Biology	3	
	FSC 342	Food Safety and Hazard Analysis Critical Control Point Program	3	
	MMG 201	Fundamentals of Microbiology	3	
c.	One of the following courses:		3	a
	MTH 124	Survey of Calculus I	3	
	MTH 132	Calculus I	3	
d.	One of the following courses:		3 or 4	
	STT 200	Statistical Methods	3	
	STT 201	Statistical Methods	4	
	STT 315	Introduction to Probability and Statistics for Business	3	
e.	Three of the following courses:		9 or 10	l
	ADV 205	Principles of Advertising	3	
	FI 320	Introduction to Finance	3	
	GBL 323	Introduction to Business Law	3	
	MGT 325	Management Skills and Processes	3	
	MKT 327	Introduction to Marketing	3	
	SCM 303	Introduction to Supply Chain Management	3	
f.	Nine additional credits in Packaging courses <i>excluding</i> Packaging 490 and 492. Up to three credits in a packaging internship completed under Packaging 493 and up to 3 credits in a packaging overseas study program completed under Packaging 491 may be counted toward this requirement.			6