

MICHIGAN STATE UNIVERSITY

April 9, 2012

MEMORANDUM

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

FROM: Dr. Linda O. Stanford, Associate Provost for Academic Services

RE: Request to Change the Admission Requirement for the Bachelor of
Science Degree in Packaging

For Transmittal to the University Committee on Undergraduate Studies
(UCUS)

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

UCUS Response Requested:

Please ask the UCUS to consider the request referenced above and provide consultative commentary prior to the April 26, 2012 Full Committee, UCC meeting. Please mail the related materials referenced under the heading Attachments at the end of this memorandum to the UCUS members.

The academic program and course requests referenced above will be included on the agenda for the April 17, 2012 meeting of Subcommittee A, University Committee on Curriculum (UCC). Requests that are approved by Subcommittee A on April 17 will be before the Full Committee, UCC, for action on April 26, 2012. Requests that are approved by the Full Committee on April 26 will be included in the September, 2012, 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.

Attachments:

1. Request for Changes in an Academic Program form dated March 21, 2012: Bachelor of Science Degree in Packaging and attachments.

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University Curriculum and Catalog

176 Administration Bldg.
East Lansing, MI
48824-1046

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 Studies (UCUS) will consider this request.

a. Under the heading **Admission as a Junior** change item 2. b. to the following:

Mathematics 124 or 132.

b. Under the heading **Requirements for the Bachelor of Science Degree in Packaging** make the following changes:

(1) In item 1., replace paragraph three with the following:

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.

(2) In item 3. b. make the following changes:

(a) Change the total credits from '3 or 4' to '3'.

(b) Delete the following courses:

BS	110	Organisms and Populations	4
BS	111	Cells and Molecules	3

Add the following course:

BS	161	Cell and Molecular Biology	3
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Effective Fall 2012.

View a Program		Main Menu
Joy Speas, RO	Wednesday, 3/21/2012	
Program Name: Packaging Degree: BS Sequence Number: 4	Program Request ID: 2183	
Effective Dates: Fall 2012 - Open Status: Interim Initial Action: Change		
Requested Date: 2/24/2012 11:07:04 AM		
<p>1. Department/School/College: 02634 School of Packaging</p> <p>2. Name of Program: Packaging</p> <p>3. Name of Degree: BS</p> <p>4. Type of Program: Prev:MajorOn campus New: Major</p> <p>5. Effective Start Semester: Fall 2012</p> <p>6. Target student audience for the program: Undergraduate Packaging BS candidates</p> <p>7. Enrollment: What is the expected enrollment per year: 500 What is the minimum enrollment acceptable: 450</p> <p>8. Source of budget for the program: 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>9. Projected Costs as compared to other programs in unit: Same</p> <p>10. Staff requirement: How many additional staff will be required: 0</p>		

Who will provide the primary instruction. Describe any external linkages(industry, government, etc.):

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: Class is no longer required for graduation

13. Will additional space be required:

Type:

Approximate amount:

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:

Packaging

Print this Section

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 ~~116 or higher~~ 124 or 132.
 - 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** ~~110 or 111~~; or Food Science 342 or Microbiology 201. The completion of Chemistry 143 and 161 satisfies the laboratory requirement. Chemistry 141, 143 and 161; **Biological Science 161** or Food Science 342 or Microbiology 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 are met 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 (46 credits):

ACC	230	Survey of Accounting Concepts	3
CEM	141	General Chemistry	4

- | | | | |
|-----|-----|-------------------------------------|---|
| CEM | 143 | Survey of Organic Chemistry | 4 |
| CEM | 161 | Chemistry Laboratory I | 3 |
| PKG | 101 | Principles of Packaging | 3 |
| PKG | 221 | Packaging with Glass and Metal | 3 |
| 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 | 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 ~~or 4~~ credits):
- | | | | |
|---------------|----------------|--|--------------|
| BS | 161 | Cell and Molecular Biology | 3 |
| BS | 110 | Organisms and Populations | 3 |
| BS | 111 | Cells and Molecules | 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 credits):
- | | | | |
|-----|-----|----------------------|---|
| MTH | 124 | Survey of Calculus I | 3 |
| MTH | 132 | Calculus I | 3 |
- d. One of the following courses (3 or 4 credits):
- | | | | |
|-----|-----|---|---|
| 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 (10 to 12 credits).
- | | | | |
|-----|-----|---|---|
| ADV | 205 | Principles of Advertising | 4 |
| 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. Six additional credits in Packaging courses excluding Packaging 490 and 492. Three credits in a packaging internship completed under Packaging 493 or in a packaging overseas study program 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".

change requirements as stated: 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 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):

1. Deletion of BS 110 and 111 and addition of BS 161 as options towards meeting the ISB and major requirements. BS 110 and 111 have been discontinued. 2. Change in the admission requirement from 2.0 in MTH 116 or higher to 2.0 in MTH 124 or 132 or higher. MTH 124 or 132 is already a required course and is prerequisite for PKG 322 and 323 so should be taken before junior standing.

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

Students entering the major Fall 2012 or later.

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

Some students may not meet the revised math entry requirement. Describe impact and explain what accommodations will be made: All new students are being advised of the impending change.

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

Reasonable performance in calculus is needed for success in the major. This is part of an effort to increase standards and thereby student performance in the major.

DEPARTMENT LEVEL APPROVAL STATUS

Approved: School of Packaging
3/20/2012 4:50:02 PM by Sue Selke for Joseph H. Hotchkiss, Director

COLLEGE LEVEL APPROVAL STATUS

Approved: College of Agriculture and Natural Resources
3/21/2012 10:30:06 AM by Richard Brandenburg for Richard Brandenburg, Associate Dean

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SCHOOL of PACKAGING

Joseph H. Hotchkiss, Director

UNDERGRADUATE PROGRAMS

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

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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 ~~116 or higher~~ 124 or 132
 - 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.

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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 ~~110 or 114~~ 1161; or Food Science 342 or Microbiology 201. The completion of Chemistry 143 and 161 satisfies the laboratory requirement. Chemistry 141, 143 and 161; Food Science 342 or Microbiology 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:

1161
Biological Science 1161;
and Molecular Genetics

CREDITS

a.	All of the following courses:	46
	ACC 230 Survey of Accounting Concepts	3
	CEM 141 General Chemistry	4
	CEM 143 Survey of Organic Chemistry	4
	CEM 161 Chemistry Laboratory I	1
	PKG 101 Principles of Packaging	3
	PKG 221 Packaging with Glass and Metal	3
	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	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 or 2
	BS 110 Organisms and Populations	4
	BS 111 Cells and Molecules	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
	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:	10 to 12
	ADV 205 Principles of Advertising	4
	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.	Six additional credits in Packaging courses <i>excluding</i> Packaging 490 and 492. Three credits in a packaging internship completed under Packaging 493 or in a packaging overseas study program may be counted toward this requirement.	6

BS 161 Cell and Molecular Biology 3