

**INSTRUCTIONAL MATERIALS ADOPTION**

VENDOR: Thomson/Delmar INSTRUCTIONAL MATERIALS: Ag: Science & Fundamentals

SUBJECT: Agriculture Biotechnology COPYRIGHT DATE(S): 2002

INSTRUCTIONAL MATERIALS ADOPTION: GENERIC EVALUATION CRITERIA

**GROUP II – 2002 TO 2008**

SE ISBN 0766816648  
TE ISBN 0766816656

R-E-S-P-O-N-S-E-S

YES	NO	N/A	CRITERIA	NOTES
-----	----	-----	----------	-------

I. INTER-ETHNIC

___	___	___	1. The instructional materials meets the requirements of inter-ethnic: concept, content, and illustration, as set by West Virginia Board of Education Policy (Adopted December 1970).	
-----	-----	-----	---	--

II. EQUAL OPPORTUNITY

___	___	___	1. The instructional material meets the requirements of "equal opportunity" concept, content, illustration, heritage, roles, contributions, experiences, and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	
-----	-----	-----	--	--

INSTRUCTIONAL  
MATERIALS: Ag. Science & Fundamentals

VENDOR: Thomson/Delmar

SUBJECT: Agriculture Biotechnology

COPYRIGHT DATE(S): 2002

SE ISBN: 0766816648

TE ISBN: 0766816656

COMMENTS: \_\_\_\_\_

INSTRUCTIONAL MATERIALS ADOPTION: GENERAL EVALUATION CRITERIA

**GROUP VI – 2002 to 2008  
Agricultural Education  
Robert C. Beach Credit Courses**

(Vendor/Publisher)  
SPECIFIC LOCATION  
OF CONTENT WITHIN  
PRODUCT

I = In-depth  
A = Adequate  
M = Minimal  
N = Nonexistent

(IMR Committee)  
RESPONSES  
I    A    M    N

**MULTIMEDIA**

Offer appropriate multimedia (e.g. computer software, audio, visual, Internet access) in order to :

- |   |   |   |   |   |
|---|---|---|---|---|
| 1. Problem solve; locate, evaluate and collect information; develop positive attitudes toward technology; and use databases, spreadsheets and graphics. | — | ✓ | — | — |
| 2. Provide a web site which links to relevant sites containing suggested lesson plans and student activities.   | — | ✓ | — | — |
| 3. Integrate current technology into the curriculum.  | — | ✓ | — | — |
| 4. Use TV/Satellite, VCR, DVD, ect., to retrieve and relate information.  | — | — | ✓ | — |

**READING STRATEGIES**

- |   |   |   |   |   |
|---|---|---|---|---|
| 1. Include activities using graphic organizers (e.g., webbing and mapping). | — | ✓ | — | — |
| 2. Promote independent reading skills and study techniques                  | — | ✓ | — | — |
| 3. Present varied teaching models.  | — | ✓ | — | — |

**LEARNING STYLES**

Learning activities and labs should address the varied learning styles and multiple intelligences of students and include models for insightful decision-making by the teacher. Reteach, practice, and enrichment activities should be provided.	—	✓	—	—
--	---	---	---	---

I = In-depth  
 A = Adequate  
 M = Minimal  
 N = Nonexistent

## GENERAL CRITERIA

(Vendor/Publisher)  
 SPECIFIC LOCATION  
 OF CONTENT WITHIN  
 PRODUCT

I = In-depth  
 A = Adequate  
 M = Minimal  
 N = Nonexistent

(IMR Committee)  
 RESPONSES

I    A    M    N

### CRITICAL THINKING SKILLS

Questioning models should include higher order thinking skills to analyze problems and implement solutions.

—    ✓    —    —

### LIFE SKILLS

Learning activities should be applicable to life skills, including but not limited to: using reference tools, completing an application, interviewing and setting goals.

—    ✓    —    —

### CLASSROOM MANAGEMENT

1. Learning activities should include opportunities for large, small and cooperative learning groups through panel discussions, peer teaching, and independent learning in a variety of environments both indoor and outdoor.

—    ✓    —    —

2. Engage in active inquiries, investigations and hands-on activities for a minimum of 50 percent of the instructional time to develop conceptual understanding and laboratory skills.

—    ✓    —    —

### INSTRUCTIONAL MATERIALS

Student materials should include, but not be limited to:

1. Extensive and varied opportunities to practice targeted skills.

—    ✓    —    —

2. Reteaching, practice, and enrichment materials.

—    ✓    —    —

3. Leveled texts that will allow students to read independently (Grades 7-12).

—    ✓    —    —

### ASSESSMENT

Assessment materials should include, but not be limited to:

1. Practice available in norm referenced, criterion referenced and performance based measures.

—    ✓    —    —

2. Varied assessment techniques (e.g., true/false, multiple choice, short answer) with teacher text indicating test bank answers and additional resources.

—    ✓    —    —

INSTRUCTIONAL  
MATERIALS: Ag. Science & Fundamentals

VENDOR: Thomson/Delmar

SUBJECT: Agriculture Biotechnology

COPYRIGHT DATE(S): 2002

SE ISBN: \_\_\_\_\_

TE ISBN: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

INSTRUCTIONAL MATERIALS ADOPTION: SPECIFIC EVALUATION CRITERIA

**GROUP VI – 2002 to 2008  
Agricultural Education  
Agricultural Biotechnology**

(Vendor/Publisher)  
SPECIFIC LOCATION  
OF CONTENT WITHIN  
PRODUCT

I = In-depth  
A = Adequate  
M = Minimal  
N = Nonexistent

(IMR Committee)  
RESPONSES  
I    A    M    N

**Course Description:** This course of study is designed to provide knowledge, skills and competencies regarding the application of biotechnology to agriculture. This course establishes a basic understanding of biotechnology, genetics, and explores agricultural applications and related careers.

**ORIENTATION TO BIOTECHNOLOGY**

The instructional materials present information in a manner that enables the student to:

- |       |   |     |   |     |     |
|-------|---|-----|---|-----|-----|
| _____ | 1. Investigate biotechnology and its application to Agriscience.  | ___ | ✓ | ___ | ___ |
| _____ | 2. Research the biotechnology industry and provide information regarding future careers in Agriscience and the impact of biotechnology on the consumer and the agricultural industry. | ___ | ✓ | ___ | ___ |

**GENETICS AND GENETIC ENGINEERING**

The instructional materials present information in a manner that enables the student to:

- |       |  |     |     |     |     |
|-------|--|-----|-----|-----|-----|
| _____ | 1. Define and apply basic genetic terms.   | ✓   | ___ | ___ | ___ |
| _____ | 2. Explain the concept of heritability.  | ___ | ✓   | ___ | ___ |
| _____ | 3. Compare and contrast methods of transferring genetic information.                                       | ___ | ✓   | ___ | ___ |
| _____ | 4. Explain the concepts dominant and recessive genes and relate these concepts to common heritable traits. | ___ | ✓   | ___ | ___ |
| _____ | 5. Explain and illustrate recombinant DNA procedures.  | ___ | ✓   | ___ | ___ |

I = In-depth  
 A = Adequate  
 M = Minimal  
 N = Nonexistent

**AGRICULTURAL BIOTECHNOLOGY  
 SPECIFIC CRITERIA**

(Vendor/Publisher)  
 SPECIFIC LOCATION  
 OF CONTENT WITHIN  
 PRODUCT

I = In-depth  
 A = Adequate  
 M = Minimal  
 N = Nonexistent

(IMR Committee)  
 RESPONSES

I    A    M    N

_____	6. Explore emerging technologies of genetic engineering.	___	✓	___	___
_____	7. Properly and safely manipulate equipment and procedures used in performing genetic engineering tasks.	___	✓	___	___

**THE APPLICATION OF BIOTECHNOLOGY TO  
 ANIMAL MANAGEMENT REPRODUCTION**

The instructional materials present information in a manner that enables the student to:

_____	1. Apply the principles of biotechnology to animal selection.	___	✓	___	___
_____	2. Apply the principles of biotechnology to animal health.	___	___	✓	___
_____	3. Apply the principles of biotechnology to the management of animal waste.	___	___	___	✓
_____	4. Describe the purpose and procedures of artificial insemination and embryo transfer in animal science.	___	✓	___	___
_____	5. Investigate and discuss the application of biotechnology to estrus manipulation	___	___	✓	___
_____	6. Explore developments in biotechnology regarding gender selection.	___	✓	___	___

**THE APPLICATION OF BIOTECHNOLOGY TO  
 PLANT PROPAGATION, GROWTH, AND  
 DEVELOPMENT**

The instructional materials present information in a manner that enables the student to:

_____	1. Provide information relative to the design and operation of biotechnology experiments involving sexual and asexual plant propagation.	___	✓	___	___
_____	2. Compare and contrast various tissue culturing techniques.	___	✓	___	___
_____	3. Discuss the effects of biotechnology on plant growth.	___	✓	___	___

I = In-depth  
 A = Adequate  
 M = Minimal  
 N = Nonexistent

**AGRICULTURAL BIOTECHNOLOGY  
 SPECIFIC CRITERIA**

(Vendor/Publisher)  
 SPECIFIC LOCATION  
 OF CONTENT WITHIN  
 PRODUCT

I = In-depth  
 A = Adequate  
 M = Minimal  
 N = Nonexistent

(IMR Committee)  
 RESPONSES

I    A    M    N

---

**ETHICAL QUESTIONS CREATED BY  
 BIOTECHNOLOGY**

The instructional materials present information in a manner  
 that enables the student to:

1. Examine ethical questions raised by biotechnology.

\_\_\_  \_\_\_ \_\_\_