

**ANNUAL REPORT ON THE ARTICULATION EFFORTS AND ACTIVITIES IMPLEMENTED  
BY THE COMMUNITY COLLEGES AND THE INSTITUTIONS OF HIGHER EDUCATION  
GOVERNED BY THE BOARD OF REGENTS**

**Action Requested:** (1) Consider approval of the annual report to the Iowa General Assembly regarding articulation efforts and activities implemented by the community colleges and the Regent universities from September 2010 to October 2011. (2) Direct the Board Office to submit the final report to the General Assembly by January 10, 2012.

**Executive Summary:** As a result of legislation in 2009, HF 815 (Attachment A) directed the Iowa Department of Education, the Iowa public community colleges, and the Board of Regents to collaborate on articulation efforts and activities, including the dissemination of articulation information.

Preparation of the update was a collaborative effort between the Iowa Department of Education, the Liaison Advisory Committee on Transfer Students (LACTS), and Iowa's public two-year and four-year institutions of higher education. It was reviewed by the Iowa Community College Presidents Association, the Regents Committee on Educational Relations (RCER), the community college chief academic officers, and the Council of Provosts.

**Background:**

The Regent universities and Iowa public community colleges have a long history of articulation for the purpose of helping to make the transition of students between Iowa public institutions of higher education as smooth and seamless as possible.

**Highlights of articulation activities:**

- ◆ The Liaison Advisory Committee on Transfer Students was created in 1972 as an advisory group of representatives from Iowa community colleges and Regent universities to provide a conduit for articulation issues or concerns with statewide impact.
- ◆ Since 1972, eight statewide articulation agreements have been signed between the two sectors of public higher education in the following areas – common grading symbols and definitions; career and technical credit; international student academic credential evaluation; College Level Examination Program (CLEP); electronics/electronics-based technology; military credit; associate of arts; and associate of science.
- ◆ More than 1,000 individual agreements exist between Iowa's public universities and community colleges.
- ◆ More than 10,000 students transfer credits annually from Iowa's community colleges to the Regent universities.
- ◆ In 2001, the Board of Regents and the public community colleges created the 2+2 Council which recommended the creation of a bachelor of applied studies program at the Regent universities. In 2005, the Board approved the implementation of that program at the University of Iowa.

- ⇒ In 2010-11, there were 250 students enrolled in coursework in the Bachelor of Applied Studies, including 153 students who were newly admitted. During that period, there were 21 students who graduated from the program, which represents an increase of 110% from the prior year.
- ⇒ The University of Iowa has established partnerships with Eastern Iowa Community College District, Des Moines Area Community College, Kirkwood Community College, Western Iowa Tech Community College, Iowa Western Community College, Southwest Community College, Indian Hills Community College, Iowa Lakes Community College, North Iowa Area Community College, Northeast Iowa Community College, and Hawkeye Community College to offer two blended courses each semester leading toward the completion of a Bachelor of Applied Studies degree.
- ◇ In 2008, the Board of Regents, in collaboration with Iowa public community colleges, launched an articulation website called [TransferInIowa.org](http://TransferInIowa.org). The primary focus of the Articulation Website is to allow Iowans to know at the time of enrollment in a community college course (1) whether the credit will be accepted by the public university of the student's choice; (2) the category in which the university will apply the credit; and (3) to which degree program or programs the university will apply the credit.
  - ⇒ Between January and October 2010, the [www.TransferInIowa.org](http://www.TransferInIowa.org) articulation website recorded 11,233 unique visitors according to a tracking tool being used; this is an increase of 41% from the prior year. The University of Iowa's I-CHART articulation planning website recorded 26,573 unique visitors; Iowa State University's TRANSIT articulation planning website recorded 18,284 unique visitors; and the University of Northern Iowa's TRANSFER PLAN-IT recorded 17,425 unique visitors.
- ◇ The three Regent universities have articulation programs with each of the public community colleges. The purpose of these programs is to establish early connections with community college students who anticipate transferring to a Regent university.
  - ⇒ The University of Iowa's *2 Plus 2 Guaranteed Graduation Plan* connects community college students with advisors at the university so that students take the right courses at the right time to complete both degrees in a total of four years.
  - ⇒ Iowa State University's *Admissions Partnership Program* guarantees admission to ISU if requirements are met; and provides academic advising and mentoring and degree planning to ensure timely graduation, among other benefits.
  - ⇒ The University of Northern Iowa's *Admissions Partnership Program* assists community college students to achieve a seamless transition from the community college to UNI. All 120 majors at UNI are available with the program. Students who are accepted into the program meet regularly with academic advisors from both their community college and UNI to determine coursework and discuss degree progress.

#### Highlights of HF 815 (Attachment B)

- ◇ The Iowa Department of Education is responsible for developing a plan which describes how secondary school students and community college students can find and use the [www.TransferInIowa.org](http://www.TransferInIowa.org) articulation website.

- ◇ *The Board of Regents and Iowa public community colleges must enter into a statewide articulation agreement which provides for the seamless transfer of academic credits from a completed associate of arts or associate of science degree program offered by a community college to a baccalaureate degree program at a Regent university.*
  - ⇒ The associate of arts degree articulation agreement was originally signed on December 2, 1981. It is affirmed annually; the most recent reaffirmation was on April 15, 2011. This agreement allows a minimum of 60 credit hours of courses designed and acceptable for transfer and may include up to 16 credit hours of career and technical courses.
  - ⇒ The associate of science degree articulation agreement was originally signed on April 18, 2008. The most recent reaffirmation was on April 15, 2011. This agreement specifies that the requirements for the associate of science degree are the same as for the associate of arts degree with the following exceptions – distribution of hours include 20 credit hours of mathematics and science; additional general education courses may be required at the Regent universities.
- ◇ *The Regent universities and the public community colleges must identify a transfer and articulation contact office or person to be included on the [www.TransferInIowa.org](http://www.TransferInIowa.org) articulation website. The list of contact persons is available on the [www.TransferInIowa.org](http://www.TransferInIowa.org) articulation website. It is updated annually or on an as needed basis. ([http://www.transferiniowa.org/pdf/ta\\_contact\\_list.pdf](http://www.transferiniowa.org/pdf/ta_contact_list.pdf))*
- ◇ *The public community colleges and Regent universities must collaborate to develop a systematic process for expanding academic discipline meetings between the community college faculty and the faculty of the Regent universities.*
  - ⇒ The Liaison Advisory Committee for Transfer Students (LACTS) was charged with developing a systematic process for expanding academic discipline faculty meetings for approval by the Council of Provosts and the community college chief academic officers. A systematic process was approved on October 8, 2010 at a joint meeting of the Iowa community college chief academic officers and Regent university Council of Provosts (Attachment D). The process was used during 2010-2011 to conduct academic discipline faculty meetings.
  - ⇒ During 2009-2010, Regent university and community college faculty held academic discipline meetings in mathematics, marketing, and early childhood. During 2010-2011, Regent university and community college faculty held academic discipline meetings in Criminology/Criminal Justice; Communications/English/Speech; Biology; Marketing; Early Childhood Education; Agriculture/Animal Science/Agronomy/Horticulture; and Mathematics.
- ◇ *The public community colleges and Regent universities must collaborate to develop a process to examine a minimum of eight new associate of applied science degree programs for which articulation agreements would serve students' continued academic success in those degree programs.*
  - ⇒ The community colleges and Regent universities prepared program inventories to identify areas of articulation opportunity.

- ⇒ The third joint meeting between the community college chief academic officers and the Regent university provosts was held on October 26, 2011 at the University of Northern Iowa. One of the agenda items was to identify a core curriculum area for which a transition guide would be developed; the unanimous choice was Chemistry. The Biological Sciences Transition Guide was prepared during 2010-2011 and formally approved by the provosts and chief academic officers at the joint meeting. It is available at the following link: <http://www.transferinlowa.org/transition.php>.
- ⇒ A two-year strategic plan will be developed to define best practices for individual institutions to pursue articulation opportunities for career and technical programs.
- ◇ *The Board of Regents, in consultation with the public community colleges, must develop criteria to prioritize core curriculum areas and create or review transition guides for the core curriculum areas.*
  - ⇒ Course equivalency guide are available on the [www.TransferInIowa.org](http://www.TransferInIowa.org) articulation website.
  - ⇒ The transition guides will be included on the [www.TransferInIowa.org](http://www.TransferInIowa.org) articulation website. The transition guide completed in 2010-2011 is the Biological Sciences Transition Guide and is available at <http://www.transferinlowa.org/transition.php>.

This update will be submitted to the General Assembly by January 10, 2012.

Attachment C describes the articulation and transfer efforts identified by the Regent universities and the community colleges between October 2010 and September 2011.

HOUSE FILE 815

AN ACT RELATING TO ARTICULATION AGREEMENTS BETWEEN PUBLIC POSTSECONDARY INSTITUTIONS AND TO THE DISSEMINATION OF ARTICULATION INFORMATION.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

Section 1. Section 256.9, Code 2009, is amended by adding the following new subsection:

NEW SUBSECTION. 61. Develop and implement a plan to provide, at least twice annually to all principals and guidance counselors employed by school districts and accredited nonpublic schools, notice describing how students can find and use the articulation information available on the website maintained by the state board of regents. The plan shall include suggested methods for elementary and secondary schools and community colleges to effectively communicate information about the articulation website to the following:

- a. To all elementary and secondary school students interested in or potentially interested in attending a community college or institution of higher education governed by the state board of regents.
- b. To all community college students interested in or potentially interested in admission to a baccalaureate degree program offered by an institution of higher education governed by the state board of regents.

Section 2. Section 260C.14, Code 2009, is amended by adding the following new subsection:

NEW SUBSECTION. 23. Enter into a collective statewide articulation agreement with the state board of regents pursuant to section 262.9, subsection 32, which shall provide for the seamless transfer of academic credits from a completed associate of arts or associate of science degree program offered by a community college to a baccalaureate degree program offered by an institution of higher education governed by the state board of regents. The board shall also do the following:

- a. Identify a transfer and articulation contact office or person, publicize transfer and articulation information and the contact office or person, and submit the contact information to the state board of regents, which shall publish the contact information on its articulation website.
- b. Collaborate with the state board of regents to meet the requirements specified in section 262.9, subsection 32, including but not limited to developing a systematic process for expanding academic discipline and meetings between the community college faculty and faculty of the institutions of higher education governed by the state board of regents, developing criteria to prioritize core curriculum areas, promoting greater awareness of articulation-related activities, facilitating additional opportunities for individual institutions to pursue program articulation agreements for career and technical educational programs, and developing and implementing a process to examine a minimum of eight new associate of applied science degree programs for which articulation agreements would serve students' continued academic success in those degree programs.

Section 3. Section 262.9, Code 2009, is amended by adding the following new subsection:

NEW SUBSECTION. 32. In consultation with the state board for community colleges established pursuant to section 260C.3, establish and enter into a collective statewide articulation agreement with the community colleges established pursuant to chapter 260C, which shall provide for the seamless transfer of academic credits from a completed associate of arts or associate of science degree program offered by a community college to a baccalaureate degree program offered by an institution of higher education governed by the board. The board shall also do the following:

- a. Require each of the institutions of higher education governed by the board to identify a transfer and articulation contact office or person, publicize transfer and articulation information and the contact office or person, and submit the contact information to the board for publication on its articulation website.
- b. Develop, in collaboration with the boards of directors of the community colleges, a systematic process for expanding academic discipline and meetings between the community college faculty and faculty of the institutions of higher education governed by the board. The board shall conduct and jointly administer with the boards of directors of the community colleges four program and academic discipline meetings each academic year for the purpose of enhancing alignment between course content and expectations at the community colleges and institutions of higher education governed by the state board of regents.
- c. Develop criteria to prioritize core curriculum areas and create or review transition guides for the core curriculum areas.
- d. Include on its articulation website course equivalency and transition guides for each of the institutions of higher education governed by the board.
- e. Jointly, with the boards of directors of the community colleges, select academic departments in which to articulate first-year and second-year courses through faculty-to-faculty meetings in accordance with paragraph "b". However, course-to-course equivalencies need not occur in an academic discipline when the board and the community colleges jointly determine that course content is incompatible.
- f. Promote greater awareness of articulation-related activities, including the articulation website maintained by the board and articulation agreements in which the institutions participate.
- g. Facilitate additional opportunities for individual institutions to pursue program articulation agreements for community college career and technical education programs and programs of study offered by the institutions of higher education governed by the board.

- h. Develop and implement by January 1, 2012, a process to examine a minimum of eight new community college associate of applied science degree programs for which articulation agreements between the community colleges and the institutions of higher education governed by the board would serve students' continued academic success in those degree programs.
  
- i. Prepare, jointly with the department of education and the liaison advisory committee on transfer students, and submit by January 1 (changed to January 10 by 2010 legislation) annually to the general assembly, an update on the articulation efforts and activities implemented by the community colleges and the institutions of higher education governed by the board.

UPDATE ON THE ARTICULATION EFFORTS AND ACTIVITIES IMPLEMENTED BY THE COMMUNITY COLLEGES AND THE INSTITUTIONS OF HIGHER EDUCATION GOVERNED BY THE BOARD OF REGENTS  
OCTOBER 2010 – SEPTEMBER 2011

The following update has been prepared to be submitted to the Iowa General Assembly by January 10, 2012, as specified in HF 815 (AN ACT RELATING TO ARTICULATION AGREEMENTS BETWEEN PUBLIC POSTSECONDARY INSTITUTIONS AND TO THE DISSEMINATION OF ARTICULATION INFORMATION).

LEGISLATION	STATUS
<p>§61. Develop and implement a plan to provide, at least twice annually to all principals and guidance counselors employed by schools districts and accredited nonpublic schools, notice describing how students can find and use the articulation information available on the website maintained by the state board of regents.</p>	<ul style="list-style-type: none"> <li>◆ The Iowa Department of Education communicates with principals and guidance counselors at public and nonpublic schools concerning the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.               <ul style="list-style-type: none"> <li>⇒ The Department sends out an electronic newsletter each month to all superintendents and principals in the State. The October and February issues of the <i>School Leader Update</i> contain transfer and articulation information and the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website. Past copies of the newsletter are also posted to the Department's website.<sup>1</sup></li> </ul> </li> <li>◆ School guidance counselors are sent information electronically about the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> website each October and February.</li> <li>◆ Information about the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website was included in the <i>Community College Leader Bulletin</i> fall and spring issues.<sup>2</sup> The Bulletin is an electronic newsletter which is sent to a variety of groups at the community colleges. Information about the website will be included in <i>The Bulletin</i> twice annually.</li> <li>◆ The Department of Education works with local school districts to include transfer information for parents and students through local school district newsletters and local school websites.</li> </ul>
<p>The plan shall include suggested methods for elementary and secondary schools and community colleges to effectively communicate information about the articulation website to the following:</p>	

<sup>1</sup> [http://www.iowa.gov/educate/index.php?option=com\\_content&view=article&id=854&catid=243&Itemid=1503](http://www.iowa.gov/educate/index.php?option=com_content&view=article&id=854&catid=243&Itemid=1503).

<sup>2</sup> [http://www.iowa.gov/educate/index.php?option=com\\_content&view=article&id=1703:leader-bulletin&catid=183:community-colleges](http://www.iowa.gov/educate/index.php?option=com_content&view=article&id=1703:leader-bulletin&catid=183:community-colleges).

<p>a. To all elementary and secondary school students interested in or potentially interested in attending a community college or institution of higher education governed by the state board of regents.</p>	<ul style="list-style-type: none"> <li>◆ The Department of Education partners with the Iowa College Student Aid Commission to provide this information to middle and high school students (6<sup>th</sup> through 12<sup>th</sup>) through the <a href="http://www.ihaveaplaniowa.gov">www.ihaveaplaniowa.gov</a> web portal as well as through materials distributed to teachers, students, and parents. Currently, teachers are providing this information directly to students. There is also a link on the web portal to the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website. In addition, the Commission provides a book called “Your Course to College” which is given to students and parents. This publication, which is printed annually, contains a section about transferring colleges. Information on the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website was added to the 2010-11 publication. Distribution of “Your Course to College” books currently is at 24,000 copies annually. Through work with the lower elementary level (Grades K-5), students and parents have access to career information, interest surveys, and real work activities through <i>I Have a Plan Iowa</i> using a product named “PAWS in Jobland.”</li> </ul>
<p>b. To all community college students interested in or potentially interested in admission to a baccalaureate degree program offered by an institution of higher education governed by the state board of regents.</p>	<ul style="list-style-type: none"> <li>◆ The Department of Education works with the Chief Student Services Administrators at the 15 community colleges of Iowa to provide this information through several forms of distribution. Through an e-mail distribution list at each of the colleges, information about the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website is sent to all enrolled students. Beginning in the 2010-11 academic year, information about the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website was added to student handbooks by most of the community colleges; the remainder will do so in 2012-2013. Student handbooks are provided to all enrolled community college students in either a printed or electronic format.</li> </ul>
<p>§23. Enter into a collective statewide articulation agreement with the state board of regents pursuant to §262.9. subsection</p>	<ul style="list-style-type: none"> <li>◆ The Associate of Arts degree articulation agreement was originally signed on December 2, 1981. The most recent reaffirmation was on April 15, 2011. The next scheduled reaffirmation will occur on April 13, 2012. The agreement includes the following elements:</li> </ul>

32, which shall provide for the seamless transfer of academic credits from a completed associate of arts or associate of science degree program offered by a community college to a baccalaureate degree program offered by an institution of higher education governed by the state board of regents.

- ⇒ Minimum of 60 credit hours of courses designed and acceptable for transfer and may include up to 16 credit hours of career and technical courses.
- ⇒ General education contains a minimum of 40 credit hours evenly distributed among arts and sciences disciplines.
- ⇒ Remaining 20 semester hours are elective credits including up to 16 semester hours of career and technical credit.
- ⇒ Foreign language proficiency must be met at each Regent university.
- ⇒ A minimum 2.0 grade point average is required.
- ⇒ Students who meet the above requirements and transfer with an Associate of Arts degree will have met all general education requirements at the Regent universities.
- ⇒ Satisfaction of above requirements allows enrollment with junior status at a Regent university.
- ⇒ Admittance of students who do not complete an Associate of Arts degree requires course by course evaluation.
- ⇒ The Associate of Arts degree articulation agreement is reviewed and reaffirmed annually.
- ◆ The Associate of Science degree articulation agreement was originally signed on April 18, 2008. The most recent reaffirmation was on April 15, 2011. The next scheduled reaffirmation will occur on April 13, 2012. The agreement includes the following elements:
  - ⇒ The requirements for the Associate of Science degree are the same as for the Associate of Arts degree with the following exceptions:
    - Distribution of hours includes 20 credit hours of mathematics and science.
    - Additional general education courses may be required at the Regent universities.
- ◆ The Iowa Department of Education began work in 2011 with the 15 community colleges to develop a web portal to collect curriculum and articulation agreement information. Full implementation of the web portal will require two years to complete (September 2011 to August 2013). The web portal is called CurricUNET and it contains the following features:
  - ⇒ It will use web forms for all input required for course and program proposals.

	<ul style="list-style-type: none"> <li>⇒ All input fields will be entered into a relational database which facilitates searches, flexible report production; it interfaces with related systems, such as catalog production and scheduling building.</li> <li>⇒ All necessary notifications will be automated and all steps in the process will be tracked with an automated workflow module. As a result, a real-time view of the workflow for each proposal will be able to be displayed at any time showing the exact current location of the proposal.</li> <li>⇒ There will be historical tracking of all courses and programs.</li> <li>⇒ All articulation agreements will be maintained in an articulation database by institution.</li> <li>⇒ The system will be designed to facilitate automated interface to various statewide processes, as required.</li> </ul>
<p>The board shall also do the following:</p>	
<p>a. Identify a transfer and articulation contact office or person, publicize transfer and articulation transfer and the contact office or person, and submit the contact information to</p>	<ul style="list-style-type: none"> <li>◆ A transfer and articulation contact person to assist in resolving issues related to the acceptance and/or application of transfer credit was identified for each two-year and four-year public institution.</li> <li>◆ Contact person information was submitted by the community college presidents to the Board of Regents, State of Iowa, for the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.</li> </ul>

<p>the state board of regents, which shall make public the contact information on its articulation website.</p>	<ul style="list-style-type: none"> <li>◆ The current list of transfer and articulation contacts has been posted to the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.</li> <li>◆ The Articulation Website Evaluation Team developed a description of the responsibilities of the contact person and distributed it to all contact persons.</li> <li>◆ The list is reviewed annually and updated as needed.</li> </ul>
<p>b. Collaborate with the state board of regents to meet the requirements specified in §262.9, subsection 32, including but not limited to developing a systematic process for expanding academic discipline and meetings between the community college faculty and faculty of the institutions of higher education governed by the state board of regents,</p>	<ul style="list-style-type: none"> <li>◆ The Liaison Advisory Committee for Transfer Students (LACTS) developed a systematic process for expanding academic discipline meetings and it was approved by the community college chief academic officers and the Regent university provosts. Key elements of this process include the following: <ul style="list-style-type: none"> <li>⇒ Surveys are conducted every third year to discover and identify academic opportunities with promise for articulation.</li> <li>⇒ Establishment of multi-year calendars for planning and leveraging of other existing meeting opportunities.</li> <li>⇒ Collaborative planning by representatives from the community colleges and Regent universities.</li> <li>⇒ Best practices meeting design, with flexibility of meeting format and activities to meet varying needs of disciplines, using best practices and resulting in an action plan.</li> <li>⇒ Expectation of meeting outcomes and a summary report that indicates agreed upon action items and communication with attendees and other stakeholders.</li> <li>⇒ Evaluation of both the process and the meeting with a focus on continuous improvement.</li> <li>⇒ Eventual institutionalizing of the meeting outcomes.</li> </ul> </li> <li>◆ During 2009-2010, Regent university and community college faculty held academic discipline meetings in mathematics, marketing, and early childhood education. During 2010-2011, Regent university and community college faculty held academic discipline meetings in Criminology/Criminal Justice; Communications/English/Speech; Biology; Marketing; Early Childhood Education; Agriculture/Animal Science/Agronomy/Horticulture; and Mathematics.</li> </ul>

<p>developing criteria to prioritize core curriculum areas,</p> <p>promoting greater awareness of articulation-related activities,</p> <p>facilitating additional opportunities for individual institutions to pursue program articulation agreements for career and technical education programs,</p> <p>and developing and implementing a process to examine a minimum of eight new associate of applied science degree programs for which</p>	<ul style="list-style-type: none"> <li>◆ Using the surveys conducted in 2009, the 2011-2012 year plans are underway for Regent university and community college faculty to hold discipline meetings in physics, psychology, and chemistry.</li> <li>◆ A survey will be conducted during 2011-2012 to identify and prioritize academic areas for the 2012-2013 academic year.</li>   <li>◆ Preliminary analysis indicated a number of opportunities to create new articulation agreements and faculty-to-faculty academic discipline meetings. The third annual joint meeting between Regent university provosts and Iowa community college chief academic officers was held on October 26, 2011. The group discussed the prioritization of developing new articulation agreements and academic discipline meetings and a new core curriculum area was selected for the development of a transition guide.</li>   <li>◆ The primary mechanism/vehicle for promoting greater awareness is through the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.</li> <li>◆ Between January – October 2011, the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website tracked and recorded 11,233 unique visitors; this is a 41% increase from the prior year.<sup>3</sup> The University of Iowa’s I-CHART articulation planning website recorded 26,573 unique visitors; Iowa State University’s TRANSIT articulation planning website recorded 18,284 unique visitors; and the University of Northern Iowa’s TRANSFER PLAN-IT recorded 17,425 unique visitors.</li>   <li>◆ In Summer 2009, community colleges and Regent universities conducted a program inventory to identify areas of articulation opportunity.</li> <li>◆ On October 28, 2009, a joint meeting was held at the University of Northern Iowa between community college chief academic officers and Regent university provosts to prioritize the programs identified in the inventory best suited for articulation. Annual joint meetings were conducted in October 2010 and October 2011. <ul style="list-style-type: none"> <li>⇒ Year 1 programs included Mathematics, Early Childhood Education and Marketing. Faculty from these areas met on February 12, 2010 at the DMACC Newton campus.</li> </ul> </li> </ul>
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<sup>3</sup> The three Regent universities’ Transfer Equivalency Guides may also be accessed through their Admissions websites.

<p>articulation agreements would serve students' continued academic success in those degree programs.</p>	<ul style="list-style-type: none"> <li>⇒ Year 2 (2010-2011) discipline meetings included general biology, microbiology, anatomy and physiology, writing (English), and criminology/criminal justice areas.</li> <li>◆ Individual institutions have continued efforts to articulate programs, which are identified in Attachments C and D.</li> <li>◆ In Summer 2010, the community college Career and Technical deans prioritized a list of Associate of Applied Science program areas for planning of faculty meetings to discuss articulation. Iowa State University will take the lead to examine the top two identified priority areas – Agriculture and Veterinary Technology.</li> <li>◆ Individual institutional efforts to articulate Associate of Applied Science programs are identified in the addenda.</li> </ul>
<p>§32. In consultation with the state board for community colleges established pursuant to §260C.3, establish and enter into a collective statewide articulation agreement with the community colleges established pursuant to chapter 260C, which shall provide for the seamless transfer of academic credits from a completed associate of arts or associate of science degree program offered by a community college to a baccalaureate degree program offered by an institution of higher education governed by the board.</p>	<ul style="list-style-type: none"> <li>◆ The Associate of Arts degree articulation agreement was originally signed on December 2, 1981. The most recent affirmation was on April 15, 2011. The next scheduled reaffirmation will occur on April 13, 2012. The agreement includes the following elements:             <ul style="list-style-type: none"> <li>⇒ Minimum of 60 credit hours of courses designed and acceptable for transfer and may include up to 16 credit hours of career and technical courses.</li> <li>⇒ General education contains a minimum of 40 credit hours evenly distributed among arts and sciences disciplines.</li> <li>⇒ Remaining 20 semester hours are elective credits including up to 16 semester hours of career and technical credit.</li> <li>⇒ Foreign language proficiency must be met at each Regent university.</li> <li>⇒ A minimum 2.0 grade point average is required.</li> <li>⇒ Students who meet the above requirements and transfer with an Associate of Arts degree will have met all general education requirements at the Regent universities.</li> <li>⇒ Satisfaction of above requirements allows enrollment with junior status at a Regent university.</li> <li>⇒ Admittance of students who do not complete an Associate of Arts degree requires course by course evaluation.</li> <li>⇒ The Associate of Arts degree articulation agreement is reviewed and reaffirmed annually.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>◆ The Associate of Science degree articulation agreement was originally signed on April 18, 2008. The most recent reaffirmation was on April 15, 2011. The next scheduled reaffirmation will occur on April 13, 2012. The agreement includes the following elements: <ul style="list-style-type: none"> <li>⇒ The requirements for the Associate of Science degree are the same as for the Associate of Arts degree with the following exceptions: <ul style="list-style-type: none"> <li>• Distribution of hours includes 20 credit hours of mathematics and science.</li> <li>• Additional general education courses may be required at the Regent universities.</li> </ul> </li> </ul> </li> </ul>
<p>The board shall also do the following:</p>	
<p>a. Require each of the institutions of higher education governed by the board to identify a transfer and articulation contact office or person, publicize transfer and articulation information and the contact office or person, and submit the</p>	<ul style="list-style-type: none"> <li>◆ A transfer and articulation contact person to assist in resolving issues related to the acceptance and/or application of transfer credit has been identified for each two-year and four-year public institution.</li> <li>◆ Contact person information was submitted by the Regent university presidents to the Board of Regents, State of Iowa, for inclusion on the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.</li> <li>◆ The current list of transfer and articulation contacts has been posted to the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.</li> </ul>

<p>contact information to the board for publication on its articulation website.</p>	<ul style="list-style-type: none"> <li>◆ The Articulation Website Evaluation Team developed a description of the responsibilities of the contact person and distributed it to all contact persons.</li> </ul>
<p>b. Develop, in collaboration with the boards of directors of the community colleges, a systematic process for expanding academic disciplines and meetings between the community college faculty and faculty of the institutions of higher education governed by the board.</p> <p>The board shall conduct and jointly administer with the boards of directors of the community colleges four program and academic discipline meetings each academic year for the purpose of enhancing alignment between course content and expectations at the community colleges and institutions of higher education governed by the state board of regents.</p>	<ul style="list-style-type: none"> <li>◆ The Liaison Advisory Committee for Transfer Students (LACTS) developed a systematic process for expanding academic discipline meetings and it was approved by the community college chief academic officers and the Regent university provosts. Key elements of this process include the following: <ul style="list-style-type: none"> <li>⇒ Surveys are conducted every third year to discover and identify academic opportunities with promise for articulation.</li> <li>⇒ Establishment of multi-year calendars for planning and leveraging of other existing meeting opportunities.</li> <li>⇒ Collaborative planning by representatives from the community colleges and Regent universities.</li> <li>⇒ Best practices meeting design, with flexibility of meeting format and activities to meet varying needs of disciplines, using best practices and resulting in an action plan.</li> <li>⇒ Expectation of meeting outcomes and a summary report that indicates agreed upon action items and communication with attendees and other stakeholders.</li> <li>⇒ Evaluation of both the process and the meeting for continuous improvement.</li> <li>⇒ Eventual institutionalizing of the meeting outcomes.</li> </ul> </li> <li>◆ During 2009-2010, Regent university and community college faculty held academic discipline meeting in mathematics, marketing, and early childhood education. Using the surveys conducted in 2009, the 2010-2011 discipline meetings included general biology, microbiology, anatomy/physiology, writing (English), and criminology/criminal justice.</li> <li>◆ Academic areas were identified and have been prioritized for the 2011-2012 academic year – chemistry, physics, and psychology.</li> <li>◆ During 2009-2010, Regent university and community college faculty held academic discipline meeting in mathematics, marketing, and early childhood education. Using the surveys conducted in 2009, the 2010-2011 discipline meetings included general biology, microbiology, anatomy/physiology, writing (English), and criminology/criminal justice.</li> </ul>

<p>c. Develop criteria to prioritize core curriculum areas and create or review transition guides for the core curriculum areas.</p>	<ul style="list-style-type: none"> <li>◆ The plan for the core curriculum transition guides was presented to the community college chief academic officers and the Regent university provosts in October 2010. The plan was approved and Biology was selected as the first area for discussion. The next core curriculum area was selected at the joint meeting on October 26, 2011 - Chemistry.</li> </ul>
<p>d. Include on its articulation website course equivalency and transition guides for each of the institutions of higher education governed by the board.</p>	<ul style="list-style-type: none"> <li>◆ The plan for including the transition guides on <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website was developed. The transition guide and course equivalency guides will be included in the Transfer Advising tab of the website.</li> <li>◆ Course equivalency guides are available on <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.</li> </ul>
<p>e. Jointly, with the boards of directors of the community colleges, select academic depts. in which to articulate first-year and second-year courses through faculty-to-faculty meetings in accordance with paragraph "b". However, course-to-course equivalencies need not occur in an academic discipline when the board and the community colleges jointly determine that course content is incompatible.</p>	<ul style="list-style-type: none"> <li>◆ Community colleges and Regent universities conducted a program inventory to identify areas of articulation opportunity.</li> <li>◆ Joint meetings between community college chief academic officers and Regent university provosts have resulted in prioritizing programs identified in the inventory best suited for articulation. Year 1 programs included Mathematics, Early Childhood Education and Marketing. Year 2 programs included general biology, microbiology, anatomy and physiology, writing (English), and criminology/criminal justice.</li> </ul>
<p>f. Promote greater awareness of articulation-related activities, including the articulation website maintained by the board and articulation agreements in which the institutions participate.</p>	<ul style="list-style-type: none"> <li>◆ The primary mechanism/vehicle for promoting greater awareness is through the <a href="http://www.TransferInIowa.org">www.TransferInIowa.org</a> articulation website.</li> </ul>
<p>g. Facilitate additional opportunities for individual institutions to pursue program articulation agreements for community college career and technical education programs and programs of study offered by</p>	<ul style="list-style-type: none"> <li>◆ Community colleges and Regent universities conducted a program inventory to identify areas of articulation opportunity.</li> <li>◆ Joint meetings between community college chief academic officers and Regent university provosts resulted in prioritizing the programs identified in the inventory best suited for articulation. Year 1 programs included Mathematics, Early Childhood Education and Marketing. Year 2 program included general biology, microbiology, anatomy and physiology, writing (English), and criminology/criminal justice.</li> </ul>

<p>the institutions of higher education governed by the board.</p>	
<p>h. Develop and implement by January 1, 2012, a process to examine a minimum of eight new community college associate of applied science degree programs for which articulation agreements between the community colleges and the institutions of higher education governed by the board would serve students' continued academic success in those degree programs.</p>	<ul style="list-style-type: none"><li>◆ A two-year strategic plan to complete this process will be developed with a target date of June 2012. The strategic plan will include further prioritization of Associate of Applied Science programs for articulation and define best practices for individual institutions to pursue articulation for career and technical programs.</li></ul>
<p>i. Prepare, jointly with the department of education and the liaison advisory committee on transfer students, and submit by January 1 annually to the general assembly, an update on the articulation efforts and activities implemented by the community colleges and the institutions of higher education governed by the board.</p>	<ul style="list-style-type: none"><li>◆ Herewith submitted.</li></ul>

ARTICULATION/TRANSFER EFFORTS CONDUCTED BETWEEN OCTOBER 2010 – SEPTEMBER 2011

**UNIVERSITY OF IOWA**

Our continued commitment is to help students and community college advisors navigate the transfer process and to provide dependable, accurate resources which may assist both the student and advisor. We provide a broad range of training, advising, programs, ongoing support, and guidance.

The University of Iowa enrolled 1,272 new transfer students in Fall 2011, including 760 from Iowa community colleges, a 15% increase from Fall 2010. This is in part due to a very deliberate effort to serve the transfer population.

Transfer Articulation and Success Initiatives:

**2 Plus 2**

The University of Iowa offers a 2 Plus 2 Guaranteed Graduation Plan for Iowa community college students. It is similar to the Four Year Guaranteed Graduation Plan for incoming first-year students. The purpose of the 2 Plus 2 Plan is to encourage long range planning, ease student transition, and improve access, success, and degree completion. Eight hundred and eighty seven students, including 363 currently in Iowa community colleges, have registered for the 2 Plus 2 Program.

There is no cost to be in the program. Students meet graduation checkpoints for select majors during their first two years at the community college and their final two years at the UI.

Benefits of the 2+2 Program include:

- Guaranteed graduation in four years
- Access to 2 Plus 2 advisors
- Access to an updated degree evaluation on the UI Admissions web portal (Admission Profile)
- Access to early orientation/registration
- UI email address
- University ID
- Access to UI Libraries
- Student discounts to university athletic & cultural events
- Discounted memberships to campus recreation and wellness facilities
- Access to the Pomerantz Career Center including internship information, career exploration and guidance

**LACTS**

Participate in the Liaison Advisory Committee on Transfer Students (LACTS). LACTS has six voting members including three representatives from the community colleges and a representative from each of the public universities. It is an ongoing advisory committee that has an active role in facilitating transfer.

#### Articulation Conferences

Participate in Annual Statewide Regents Articulation Conferences, most recently English, Biology\*, Microbiology, Anatomy and Physiology, Criminology, and the Annual Articulation Conference to reaffirm the statewide articulation agreements between the Iowa community colleges and Regent universities.

\*The University of Iowa Biology Department participated in a statewide effort to develop a Biological Sciences Transition Guide for students transitioning from Iowa community colleges to Iowa public universities.

#### Online Transfer Articulation Tools

The university works hard to maintain up to date transfer articulation websites and advising aids, including:

- Transfer Course Equivalency Guide: <http://isis5.uiowa.edu/isis/courses/transfer.page>  
Transfer course equivalencies for commonly transferred courses.
- I-Chart: <https://www.maui.uiowa.edu/maui/pub/admissions/ichart/ichart.page>  
Transfer planning resource provided so Iowa community college students can explore how their classes transfer into majors at the University of Iowa.
- On-line advising aids and transfer pathways for students wanting to begin the coursework at an Iowa community college. Provides important advice on what courses to take prior to transferring, prerequisites, general education requirements, competitive admission, etc.
- Articulation agreements between the University of Iowa and Iowa's community colleges are detailed in [The Public Connection: A Report on the Statewide Articulation Agreements between Iowa's Community Colleges and the Regent Universities.](#)

#### Iowa Community College Arts and Sciences Deans Meetings

Attend quarterly meetings with the Iowa Community College Arts and Sciences Administrators. Discuss issues that affect transfer students, the Regent institutions, & the Iowa community colleges (September, November, February, April).

#### Campus Programs

Host a variety of on-campus programs to assist students preparing to transfer:

- Visit Day Programs (four each Spring, three each Fall)
- Multicultural Visit Day (November)
- Tippie College of Business Transfer Preview Day (December)
- Explore Engineering (October, December, January, February, March, April)

#### Advisor Training

Host on and off campus training sessions throughout the state for community college advisors. Provide the tools and knowledge necessary to effectively advise their students.

#### Transfer Listserv

Host a statewide transfer advisor listserv to provide an easy means of communication between university and community college personnel.

#### Transfer Travel

Visit every Iowa community college each semester. Meet with faculty, staff, and students to discuss university programs, policies, requirements, and resources available to students.

#### Iowa Update

Distribute updates via the *Iowa Update* Newsletter to community college staff three times per year. *Iowa Update* is produced by the University of Iowa Office of Admissions for high school and community college educators. There is also an online edition. Community college advisors can request weekly updates to supplement the printed Iowa Update. Electronic updates can be shared via e-mail or RSS feed.

#### Academic Performance Reports

Distribute GPA reports each semester to each Iowa community college that shows how their students are performing at the University of Iowa compared to other Iowa community college transfer students and native University of Iowa students.

#### Student Advising

Advise students one on one regarding course selection, university policy and admission procedures prior to admission via phone, on campus appointments, off campus appointments, email, and instant messaging conversations.

#### Social Media

Provide social media as venue through which prospective transfer students and parents can ask questions and make meaningful connections before and after they arrive on campus. Students receive important information and make connections which, we believe, make them more likely to persist once they enroll.

#### Living Learning Communities

The University of Iowa offers transfer students the opportunity to live in a living-learning community with other students who share common academic goals or interests.

#### Transfer Transition Course

The university offers a Transfer Transition Course that is designed to increase retention, ease the transition to the University, and help those students feel comfortable in their new environment.

#### Welcome Session for Transfer Students

The university offers a Welcome Week session designed to assist transfer students make the many academic and social transitions, to more fully introduce them to campus, and to enhance their opportunities for success upon transfer.

#### Transfer Think Tank

A group from across the university who has an interest in the transfer student experience has begun to discuss existing areas of transfer student support and resources on campus and explore what additional efforts may be beneficial for this population.

#### Division of Continuing Education.

The UI Division of Continuing Ed also has a long history of working with the Iowa community colleges.

- RN to BSN satellite branches at various Iowa community colleges
- Joint appointments with Western Iowa Tech CC and North Iowa Area CC

The Division of Continuing Education has developed partnerships with a number of community colleges in Iowa. These partnerships provide opportunities for students to complete an

associate's degree from their local community college, and then take University of Iowa course work online to earn a bachelor's degree.

Four degree programs are currently available:

- Bachelor of Business Administration
- Bachelor of Applied Studies (BAS)
- Bachelor of Liberal Studies (BLS)
- RN-BSN

Students may choose from five different tracks:

- Entrepreneurial Management
- General Studies
- Human Relations
- Nonprofit Management
- Political Science

Students enroll in 2 Plus 2 through an on-line application. Once enrolled, the university can advise these students and impact their future schedules. Not all students who enroll in 2 Plus 2 remain in the Plan. Some transfer to Iowa early, prior to getting their AA degree. Others change their major to one not on the plan. The goal is for students to develop a relationship with the university, plan ahead, and take coursework appropriate to their major. Those who do decrease the likelihood of experiencing transfer shock and increase the likelihood of success.

The tables below compare 2+2 transfer students with non-2+2 transfer students with AA degrees from Iowa community colleges. To be eligible for the 2+2 program, students must earn an AA degree from an Iowa community college.

**Fall 2008 Cohort**

	<b>2+2 Transfer Students (N=6)</b>	<b>Non-2+2 Transfers (N=333)</b>
Incoming Transfer School GPA	3.38	3.09
Incoming Transfer School Credits	61	62.2
First Semester GPA	2.52	2.37
One Year Cum GPA	2.56	2.68
First Semester Retention Rate	100%	85.9%
One Year Retention Rate	100%	76.3%

**Fall 2009 Cohort**

	<b>2+2 Transfer Students (N=23)</b>	<b>Non-2+2 IACC Transfers (N=349)</b>
Incoming Transfer School GPA	3.41	3.09
Incoming Transfer School Credits	59.4	63.3
First Semester GPA	2.74	2.31
One Year Cum GPA	3.05	2.69
First Semester Retention Rate	91.3%	89.4%
One Year Retention Rate	82.6%	78.2%

**Fall 2010 Cohort**

	<b>2+2 Transfer Students (N=)</b>	<b>Non-2+2 IACC Transfers (N=)</b>
Incoming Transfer School GPA	3.34	3.03
Incoming Transfer School Credits	56.69	63.5
First Semester GPA	2.82	2.55
One Year Cum GPA	3.20	2.92
First Semester Retention Rate	91.2%	87.6%
One Year Retention Rate	88.2%	74.9%

**Fall 2011 Cohort**

	<b>2+2 Transfer Students (N=34)</b>	<b>Non-2+2 IACC Transfers (N=331)</b>
Incoming Transfer School GPA	3.24	3.08
Incoming Transfer School Credits	62.0	62.2

## IOWA STATE UNIVERSITY

Iowa State enrolled 1,781 new Fall 2011 transfer undergraduates, the sixth straight year of transfer enrollment growth, and the largest transfer class on record. Of the 1,781 new transfer students, a record 1,050 came from Iowa's community colleges. Nearly one of every four undergraduates enrolled at Iowa State is a transfer student. This Fall 2011 Iowa State has 5,688 undergraduate transfer students enrolled.

Iowa State's transfer enrollment growth is the result of Iowa State's ongoing commitment to transfer students. This investment of time, resources, and energy into the transfer enterprise has resulted in Iowa State being recognized by *U.S. News and World Report* as one of the Best Colleges in the nation for enrolling transfer students.

Iowa State continues to participate in a full complement of annual and on-going partnership, articulation and outreach activities designed to strengthen our relationship with Iowa's community colleges and support as seamless a transfer as possible for our students. Examples include:

- The Admissions Partnership Program (APP) - [www.admissions.iastate.edu/partnership/](http://www.admissions.iastate.edu/partnership/)
- Hundreds of individual program and course articulation agreements with Iowa's community colleges
- Visits to every Iowa community college campus multiple times annually by transfer admissions counselors
- Campus visit opportunities designed exclusively for transfer students
- Maintenance of up-to-date transfer and articulation Web sites, including the following:
  - Transfer In Iowa at [www.transferiniowa.org/](http://www.transferiniowa.org/)
  - TRANSIT, Iowa State's on-line transfer articulation system - [transit.iastate.edu/](http://transit.iastate.edu/)
  - Course equivalency guides and transfer plans can be found at [www.admissions.iastate.edu/equiv/index.php](http://www.admissions.iastate.edu/equiv/index.php) or on [www.transferiniowa.org/](http://www.transferiniowa.org/)
- Participation in the Liaison Advisory Committee on Transfer Students (LACTS)
- Participation in the quarterly Iowa Community Colleges Arts and Sciences Administrators meetings
- Participation in the annual Arts and Sciences Administrators articulation conference and various statewide articulation meetings sponsored by the Iowa Regent universities and Iowa community colleges
- Sharing of transfer student academic performance reports with our Iowa community college partners
- Ongoing articulation efforts led by the Iowa State University Articulation Coordination Council, which is chaired by the Associate Provost for Undergraduate Programs. This Council meets regularly to identify opportunities for new and improved articulation.
- *TRANSFER*mation, a transition program designed for new entering transfer students to help facilitate a successful transfer. In its second year, *TRANSFER*mation engaged over 300 students.
- Hosted, in collaboration with the Office of the Provost, the Iowa Community College – Iowa State University Academic Roundtable in February 2011. This Roundtable provided an opportunity for key academic leaders to discuss how best to collaborate on student success and transition issues.

In addition to this list of on-going transfer activities, the following are highlights of transfer and articulation initiatives during the time period October 2010 through September 2011.

### **Reverse Credit Transfer Agreement**

Iowa State provided leadership in the development of the Reverse Credit Transfer Agreement between Iowa's Public Universities and Community Colleges. The Reverse Credit Transfer Agreement is a partnership developed by the Board of Regents and Iowa's public universities in close collaboration with Iowa's community colleges to facilitate the transfer of credits back to one of Iowa's community colleges for the purpose of providing an opportunity for students to attain a degree, diploma or certification.

The agreement builds on the many existing collaborative partnerships and articulations between the institutions that promote the success of community college students as they transition to Iowa's public universities. Information about this Agreement can be found at [www.transferiniowa.org/reverse\\_credit\\_transfer.php](http://www.transferiniowa.org/reverse_credit_transfer.php).

### **Iowa State University's Admissions Partnership Program (APP)**

Iowa State's Admissions Partnership Program (APP) celebrates five years of providing a more seamless transfer experience for Iowa's community college students.

Highlights include:

- Since program inception in fall 2006, 1700 students have participated in APP representing all 15 community colleges.
- As of September 30, 2011, there are 502 active participants in APP. A total of 695 have matriculated to Iowa State University.
- APP assessment shows positive impact on retention. The first year retention rate of transfer students who participated in APP as compared to non-APP transfers from Iowa community colleges is significantly higher for the fall 2007-2010 cohorts. See pages 30-32 for *Retention and Grade Point Average Comparisons of APP and non-APP Transfer Students*.
  - Fall 2007: 59 APP students (88% one year retention rate) compared to 889 non-APP IA CC students (77%)
  - Fall 2008: 79 APP students (85% one year retention rate) compared to 866 non-APP IA CC students (79%)
  - Fall 2009: 136 APP students (92% one year retention rate) compared to 846 non-APP IA CC students (79%)
  - Fall 2010: 137 APP students (93% one year retention rate) compared to 864 non-APP IA CC students (76%)
- Over 60 APP students are living in Iowa State residence halls this fall. A new APP admission process provides for early acceptance into APP for students wanting to live in Iowa State housing.
- Introduced an on-line version of the APP application making access to its many benefits even easier.

It includes the following benefits:

- Guaranteed admission to Iowa State provided requirements are met
- Personal academic advising and mentoring
- Degree planning to ensure timely graduation
- Free transcript exchange between the community college and Iowa State
- Real-time degree audit information on how credits will transfer and how they will apply to a chosen major
- Special early orientation invitation

- Option to lock-in bachelor's degree requirements with the same status as a student who enrolls as a first year student, direct from high school
- Guaranteed Iowa State housing at student rates
- Student discount prices for cultural and athletic events with paid activity fee
- An Iowa State Student ID (ISUCard) and e-mail account
- Exclusive transfer newsletters with career planning tips and information about campus news and events
- Access to libraries, learning communities, career exploration opportunities, clubs, and recreational facilities

### **Articulation Web Sites**

Transfer students now have access to numerous on-line planning resources, some of which include: [www.transferiniowa.org](http://www.transferiniowa.org)

<https://transit.iastate.edu/>

[www.admissions.iastate.edu/partnership/](http://www.admissions.iastate.edu/partnership/)

[www.admissions.iastate.edu/equiv](http://www.admissions.iastate.edu/equiv)

[www.admissions.iastate.edu/transfer/transfer\\_plans.php](http://www.admissions.iastate.edu/transfer/transfer_plans.php)

### **Articulation Meetings**

Iowa State faculty and staff participated in the following academic discipline meetings:

#### **Agriculture Statewide Articulation Meeting**

The College of Agriculture and Life Sciences (CALs) launched an annual summit that brings together agricultural instructors and administrators from Iowa's community colleges and Iowa State University to aggressively work on curriculum improvements and transfer plans. The Associate Dean for Academic Programs in CALs co-chaired this event with the Dean of Agriculture at Kirkwood Community College.

The inaugural Summit, titled *Preparing Science and Technology Talent for Iowa's Agriculture Industries*, was held on June 28, 2011 and had the following goals and outcomes:

1. Continue collaborations between Iowa's community colleges and Iowa State University to improve articulation and transition processes for agriculture students who begin their education at a community college and continue at Iowa State University.
2. Continue to share among faculty lessons learned related to curriculum.
3. Update knowledge about the latest trends in agriculture and related sciences.
4. Strengthen linkages between instructional programs and Iowa's agriculture industries to insure the instructional programs are preparing the workforce needed to maintain Iowa's global competitiveness.
5. As discussions and articulation work is not limited to the annual summit, continue faculty to faculty discussions throughout the academic year to improve articulation in the four disciplines discussed at the June 2011 conference (Agronomy, Ag Business, Horticulture and Animal Science) and work towards greater articulation of 200 level Animal Sciences courses during the 2011-2012 year.
6. Plan and conduct the second annual summit in June 2012.

#### **Arts and Sciences Administrators Annual Articulation Meeting**

Each spring community college and university faculty and administrators from the arts and sciences convene to focus on articulation issues related to agreed upon academic disciplines.

This year's annual meeting was held on February 11, 2011 at the DMACC Newton Campus and focused on Biological Sciences, English, and Speech.

### **Criminology Statewide Articulation Meeting**

In September 2011, criminology educators from Iowa's community colleges and public universities gathered to learn more about each others' curriculum and the educational needs of criminal justice professionals as well as discuss opportunities for improved articulation. The Department Chair for Criminology and Criminal Justice at Iowa State University served as a member of the planning committee and as a presenter. Great interest was expressed in creating new partnerships and improving existing articulations. Outreach and discussions among Iowa State and the various community colleges will continue during the 2011-2012 academic year.

### **Mathematics Articulation Efforts**

The Chair of Iowa State's Math Department continued to make progress working with faculty at Iowa's community colleges and public universities to improve math assessment and student success. The Chair meets and communicates regularly with Math faculty across the state.

### **Articulation Agreement Highlights**

Articulation agreements between Iowa State's academic departments and Iowa's community colleges continue to evolve and expand. Some examples of new or enhanced articulation agreements as well as agreements in development include:

### **Agricultural and Biosystems Engineering**

The department of Agricultural and Biosystems Engineering is currently working with DMACC to create a 2+2 or 2+3 articulation agreement. A meeting was held with the Dean of Industry and Technology, and the Chair of the Machinist Technology/Tool & Die program, on July 7, 2011 to review current transfer plans with DMACC and to identify possible improvements. The goal is to finalize the agreement this fall. DMACC is also creating a Manufacturing degree. Iowa State faculty will work closely with DMACC faculty during the curriculum development phase with the goal being to create an agreement for that program as well.

### **Agricultural Education & Studies**

**Agricultural Studies** is a broad-based program with the flexibility for students to tailor the degree program to meet their career goals. It is a very popular degree program for students interested in transferring from Iowa community colleges to ISU to complete a bachelor's degree. Forty of the 65 (62%) new Agricultural Studies students in 2010 were transfers from community colleges. Most of these students possess AAS degrees. These students are able to complete the requirements for the BS degree in Agricultural Studies within two years of transfer due to effective articulation. The career placement rate for Agricultural Studies majors has ranged between 97% - 100% over the last decade.

The Department has developed 22 transfer plans at all 15 Iowa community colleges to facilitate the transfer of students from associate degree programs to ISU to complete a BS degree. These plans are maintained on the ISU website and can be found at [www.agstudent.iastate.edu/articulation/transfer\\_plans.php](http://www.agstudent.iastate.edu/articulation/transfer_plans.php). On the same website there are also transfer plans for students earning AS and AA degrees at Iowa community colleges. Other departments in CALS also have transfer plans listed on the website.

### **Design**

The College of Design is offering a new interdisciplinary degree, the Bachelor of Design. This program will open new opportunities for transfer students and those interested in pursuing a second major outside of design, such as business, advertising or engineering. Community college transfer students could complete this degree in two years after earning an associate's degree in a related field. The program is part of the college's efforts to make design education more accessible to a greater number of students.

### **Early Childhood Education**

Iowa State's departments of Human Development and Family Studies and Curriculum & Instruction signed a new Early Childhood Education (ECE) articulation agreement with DMACC, Iowa Valley Community College, and Kirkwood Community College.

### **Engineering**

The Student Enrollment and Engagement through Connections (SEEC) project is a collaboration between Iowa State University and Des Moines Area Community College (DMACC) funded by the National Science Foundation's STEM Talent Expansion Program.

The following is from the Annual Report – Year Four SEEC: Student Enrollment and Engagement through Connections:

- “The STEM Student Enrollment and Engagement through Connections (SEEC) project, pronounced “seek,” is a collaboration between Iowa State University (ISU) and Des Moines Area Community College (DMACC). The goal of the SEEC project is to increase the number of engineering graduates at Iowa State by 100 per year, to approximately 900 graduates annually. Included within this goal are increases in the percentages of women and minority graduates in engineering at Iowa State and the number of pre-engineering students at DMACC. ISU Institutional Research projects 891 and 992 engineering graduates in the graduating classes of 2011-12 and 2012-13, respectively.”
- “Data since 2006-07, projected out to 2012-13, for the College of Engineering (CoE) illustrate the upward trend in total undergraduate engineering enrollment and new student enrollment (including transfer students). The percentage increase in enrollment from Fall 2009 to Fall 2010 was 8.4%; this compares with a Fall 2010 increase of 5.4% nationally as reported by ASEE for undergraduate engineering enrollment (ASEE Connections, May 2011). Results expected from the SEEC project are gradually being realized with the continued efforts of project partners and collaborators.”

Additionally, Iowa State and DMACC have partnered to develop a pre-engineering template. Students can take ISU's Engineering Basic Program at DMACC, 32 credit hours that make up the entire first year program, regardless of the engineering discipline. When students successfully complete these 32 credits, they meet the requirements to transfer to ISU as a sophomore.

**Kinesiology and Health**

Iowa State has partnered with DMACC to create two new 2 + 2 Programs: Health Fitness Management and Community/Public Health. Completion of the Associate of Science degree within the Fitness Management program at Des Moines Area Community College enables students to transfer all credits into the Health/Fitness Management option at Iowa State University and should ensure that the student can graduate from ISU by completing a minimum of 60 credits within the Exercise Science requirements. Similarly, completion of the AS degree in Community/Public Health at DMACC should ensure that students can graduate from ISU by completing a minimum of 60 credits within the Community/Public Health requirements.

**Supply Chain Management**

The articulation agreement between the Supply Chain Management department at Iowa State and Logistics at Iowa Central Community College was completed.

**World Languages and Cultures**

The World Languages B.A. in French, German, Russian Studies, and Spanish is articulated with the Interpretation and Translation (ITR) Associate of Science Program at DMACC-Urban. The plan is to also articulate World Languages B.A. in Linguistics with Interpretation and Translation (ITR) Associate of Science Program with DMACC-Urban.

Table 1.  
Comparison of APP and Non APP Transfer Students Retention Rates and Grade Point Averages:  
Fall 2007 Cohort

	APP Transfer Students (N=59)	Non-APP IACC Transfers (N=889)	All IACC Transfers (N=948)
Incoming Transfer School GPA	2.98	3.02	3.02
Incoming Transfer School Credits	53.2	57.6	57.3
First Semester GPA	2.35	2.45	2.44
One Year Cum GPA	2.45	2.48	2.48
First Semester Retention Rate	95%	91%	91%
One Year Retention Rate*	88%	77%	78%
Two Year Retention Rate	75%	70%	70%
Three Year Graduation Rate	46%	42%	46%
Four Year Graduation Rate	59%	59%	59%

Note: There were no statistically significant differences between the groups for this year.

Table 2.  
Comparison of APP and Non APP Transfer Students Retention Rates and Grade Point Averages:  
Fall 2008 Cohort

	APP Transfer Students (N=79)	Non-APP IACC Transfers (N=866)	All IACC Transfers (N=945)
Incoming Transfer School GPA*	3.10	2.95	2.96
Incoming Transfer School Credits	58.2	56.4	56.6
First Semester GPA	2.52	2.40	2.41
One Year Cum GPA	2.63	2.49	2.50
First Semester Retention Rate	91%	91%	91%
One Year Retention Rate	85%	79%	79%
Two Year Retention Rate	75%	68%	69%
Three Year Retention Rate	47%	43%	43%

\*Significantly different from Non-APP Transfer sample at  $p < .05$

Table 3.  
Comparison of APP and Non APP Transfer Students Retention Rates and Grade Point Averages:  
Fall 2009 Cohort

	APP Transfer Students (N=136)	Non-APP IACC Transfers (N=846)	All IACC Transfers (N=982)
Incoming Transfer School GPA*	3.06	2.94	2.95
Incoming Transfer School Credits	56.5	57.3	57.2
First Semester GPA*	2.49	2.30	2.33
One Year Cum GPA*	2.58	2.40	2.43
First Semester Retention Rate*	96%	90%	91%
One Year Retention Rate**	92%	79%	81%
Two Year Retention Rate**	81%	71%	72%

\*\*Significantly different from Non-APP Transfer sample at  $p < .1$

Table 4.  
Comparison of APP and Non APP Transfer Students Retention Rates and Grade Point Averages:  
Fall 2010 Cohort

	APP Transfer Students (N=137)	Non-APP IACC Transfers (N=864)	All IACC Transfers (N=1,001)
Incoming Transfer School GPA	3.04	2.97	2.98
Incoming Transfer School Credits	57.4	56.8	56.9
First Semester GPA	2.50	2.33	2.35
One Year Cum GPA*	2.65	2.44	2.47
First Semester Retention Rate	93%	91%	91%
One Year Retention Rate*	86%	76%	78%

\*Significantly different from Non-APP Transfer sample at  $p < .05$

Table 5.  
Comparison of APP and Non APP Transfer Students Retention Rates and Grade Point Averages:  
Fall 2011 Cohort

	APP Transfer Students (N=)	Non-APP IACC Transfers (N=)	All IACC Transfers (N=)
Incoming Transfer School GPA	3.03	3.00	2.99
Incoming Transfer School Credits	58.2	58.1	58.1
First Semester GPA			
One Year Cum GPA			
First Semester Retention Rate			
One Year Retention Rate			

## **UNIVERSITY OF NORTHERN IOWA**

The University of Northern Iowa continues its commitment to working with the Iowa community colleges to ensure a smooth transition of students between our institutions. We provide an array of resources and guidance to accomplish enrollment goals. UNI enrolled 1,082 new transfers in Fall 2011 compared to 1,138 in Fall 2010. This includes 750 students from Iowa community colleges.

Transfer initiatives include:

- A self-study of the transfer student experience was conducted at UNI using the Foundations of Excellence® Transfer Focus process developed by the Gardner Institute. Seventy-nine Academic and Student Affairs faculty, staff, and students studied nine dimensions using data and other collected evidence during the 2010-2011 academic year. UNI has established a Transfer Council to coordinate further development and implementation of the resulting recommended actions.
- The Office of Admissions coordinated the statewide Annual Articulation Conference on February, 11, 2011 in Newton. Regent and community college faculty met to discuss issues in biology (General Biology I and II, Anatomy and Physiology I and II, Microbiology), English, and speech.
- The Office of Admissions coordinated a one-day criminology faculty meeting that brought almost 60 community college and Regent faculty, along with workforce representatives to the UNI campus for an initial discussion of the criminology/criminal justice curriculum.
- UNI faculty participated in the development of the Iowa Biological Sciences Transition Guide. Numerous faculty from the community colleges and Regent universities contributed to this new tool to assist faculty, advisers and students in planning for successful transfer.
- Staff participated in the annual Regent Articulation Conference in April to review and reaffirm the eight statewide articulation agreements.
- The Director of Admissions is a member of the Liaison Advisory Committee on Transfer Students (LACTS) serving as chair for the 2010-2011 year.
- The Associate Director of Admissions attends quarterly meetings with the Iowa Community College Arts and Science Administrators.
- Two new articulation agreements were developed with Kirkwood Community College in the areas of Geographic Information Systems and Criminology.
- Admissions staff attended multiple visit programs at Hawkeye Community College (Experience Hawkeye Days) and Kirkwood Community College (TGIF) to discuss transferability of courses to prospective students.
- Transfer Coordinator visits each Iowa community college district each year.

- Admissions staff participated in transfer college fairs at the following community colleges: Eastern Iowa Community College District, DMACC, Southwestern Iowa Community College, Iowa Western Community College, Western Iowa Tech and Community College, Indian Hills Community College, Hawkeye Community College, Ellsworth Community College, Northeast Iowa Community College.
- UNI's Transfer Coordinator attended two LGBT specific college fairs to reach out to transfer students.
- A transfer-specific publication was developed that focuses on UNI's academic programs.
- Social media has been integrated into transfer communication plans.
- Transfer articulation websites are maintained with current transfer equivalency and other pertinent information:
  - Transfer College Course Equivalency List:  
[www.uni.edu/admissions/transfer/equivalency.html](http://www.uni.edu/admissions/transfer/equivalency.html).
  - Transfer Plan-It resource for community college students to use in planning for transfer to UNI and exploring their fit to UNI majors:  
<https://access.uni.edu/cgi-bin/transfer/transferPlanIt.cgi>.
- The Office of Admissions hosts multiple on-campus transfer visit opportunities including Panther Peek Days, Saturday Visit Days and individual visit times throughout the year.
- New Student Programs has initiated a Welcome Transfers lunch at the beginning of the semester to supplement the Transfer Orientation experience with an opportunity to talk with faculty and staff after the start of classes.
- An e-newsletter is distributed to community college advisors each semester.
- Transfer Student Academic Performance Reports are distributed each semester to transfer feeder institutions with five or more transfers.
- UNI participated in the development of the Reverse Transfer Credit Agreement between the community colleges and Regent universities that facilitates the transfer of university credits back to the community college to facilitate student completion of their associate degree, diploma or certification.

### **Admission Partnership Program**

UNI has Admission Partnership Program (APP) agreements with all Iowa community college districts. APP has a goal of providing early and ongoing advising to prospective transfer students while they were still at their respective community colleges. This early identification and provision of services is designed to ensure a smooth transition to UNI with the most effective application of the student's transfer credits to their UNI degree objective, ultimately resulting in more timely graduation for the student. Students may participate with all of UNI's 120 majors.

## ATTACHMENT D

### COMMUNITY COLLEGES

#### **Northeast Iowa Community College**

- Signed an Articulation Agreement with University of Iowa for Baccalaureate of Applied Science.

#### **North Iowa Area Community College**

- Articulation discussions with UNI for programs in Health, Physical Education, and Leisure Services
- Articulation discussions with University of Iowa for Entrepreneurial Management
- Articulation discussion with UNI in Teacher Education
- Articulation discussions with UNI about Graphic Media
- Continually send transcript requests from Regents for APP programs, clarify APP requirements and promote APP programs throughout the year at college orientations
- Utilize Regents course equivalencies that are available online as well as TransferInIowa.org throughout the year

#### **Iowa Lakes Community College**

- Attended the Liaison Advisory Committee on Transfer Students (LACTS) Annual Business Meeting in Ankeny on April 15, 2011.
- Continued discussions with Iowa Biological Sciences Transition Guide.
- Attended Criminal Justice articulation meeting at UNI.
- Created online eAdvising system for Iowa Lakes students that includes instant information about course and program articulation.
- Commenced internal process to review articulation agreements.

#### **Northwest Iowa Community College**

- Articulation agreement with the University of Iowa and Northwest Iowa Community College for selected bachelor's degree programs through distance education; an articulation agreement was signed in the summer of 2011

#### **Iowa Central Community College (2010-11)**

- ICCSSA Conference held Registrar's sessions where discussions were held about articulation with UI, ISU, and UNI
- Attended Transfer Advisor Workshop at the University of Iowa
- Registrar's Video Conference
- Attended Statewide Transfer Articulation Conference
- Teleconference with UNI re: Dual Admissions Partnership Program

### **Iowa Valley Community College District**

- Faculty and staff participated in February 2011 statewide articulation conference on Public Speaking, English, and Biology.
- Submitted an LSAMP<sup>4</sup> grant application with ISU and other colleges to improve STEM possibilities for local students.
- Faculty and Staff participated with ISU on First Lego League competitions both at Marshalltown Community College and at ISU.
- Met with University of Iowa officials twice regarding four on-line Bachelor degrees for articulation to improve transfer – RN to BSN, Bachelor of Applied Studies, Bachelor of Liberal Studies, and Bachelor of Business Administration.
- Transfer Fairs held at MCC and Ellsworth Community College included the Regent universities.
- ECC faculty spoke with UNI about Geospatial Technology program articulation.
- Faculty participated in developing the Biological Sciences Transition Guide.
- Met at ISU with German government officials in pursuit of Agriculture and Biotechnology program initiatives.
- Continually send transcripts requested from the Regent universities for APP programs, clarify APP requirements, and promote APP programs for all Regent universities.
- Use Regent university course equivalences on TransferInIowa.org to help advise students.
- Staff participated in April 2011 LACTS conference to re-approve statewide articulation agreements.
- Faculty and Staff participated in Criminal Justice articulation conference on September 14, 2011.
- Attended Community College-Transfer Advisor Workshop at ISU on September 24, 2010.
- Attended Transfer Advisor Workshop at UNI on April 11, 2011.
- Faculty are working on an articulation with ISU in Medical Illustration.

### **Hawkeye Community College**

- Annual Transfer fair attended by all three Regents schools. Followed by a roundtable discussion designed to update us on their programs and policies
- Advisors attend transfer advisor workshops at UNI, ISU and U of I
- Advisors attend APP Advisor day at ISU
- TRIO/Academic Advisors take students to one transfer visit day a semester at each of the Regent Universities
- Advisors met with UNI during the Spring 2011 term to update “Transfer Tip Sheets” to ensure course transferability. Also engage in regular email communication with ISU and U of I concerning Tip Sheets
- Five Liberal Arts course modifications reviewed by Regent Representatives using online HCC CurricUNET system
- APP Program with UNI and ISU/2+2 program with U of I
- All three Regents Universities participated in the Experience Hawkeye Transfer visit day hosted by the Admissions Office
  - All three also attend at least one Experience Hawkeye visit day a year
- All three Regents institutions also participated in the Transfer Table in Brock Student Center – UNI attends once a month, ISU and U of I once a semester
- Participated in statewide articulation meetings for biology
- Participated in statewide articulation meetings for written and oral communication

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<sup>4</sup> Louis Stokes Alliances for Minority Participation.

- Hawkeye Community College hosted IATYC with representative attendance from math and education disciplines and regent faculty focused on teacher preparation
- Participated with Criminal Justice LACTS group at meeting at UNI on September 14, 2011
- UNI and Mount Mercy University provided letters of support for articulation agreements with the CNC, AST and Welding programs for the DOL Advanced Manufacturing grant – March 2010
- Participated in statewide Early Childhood Education conference in February 2010
- Participated in statewide Marketing conference in February 2010
- Early Childhood Education – participate in discipline discussions throughout the academic year
- Met with U-Iowa journalism faculty – spring 2011
- Attended Transfer Workshop at the University of Iowa
- Attended Transfer Workshop at the University of Northern Iowa
- Attended APP Advisor Day at Iowa State University

### **Eastern Iowa Community College**

- UNI Admissions Partnership Agreement effective 9/10/10
- Articulation agreement between Scott Community College Honors Program and UNI Honors Program
- Addition of 2+2 in English major with the University of Iowa
- Attended ISU's Fall 2010 Articulation Update Conference
- Attended UNI's Spring 2011 Transfer Update Conference
- College Transfer Fairs were attended by ISU, SUI, and UNI each fall and spring semester
- Participated in the statewide transfer articulation conference at DMACC-Newton in February 2011; Communications, including speech
- Participated in the statewide Agriculture articulation faculty to faculty meeting at DMACC-Ankeny in June 2011

### **Kirkwood Community College**

- Program faculty had a meeting on September 22, 2011 with representatives from the Theatre program at the University of Iowa to discuss articulation and transfer.
- Nursing is updating the articulation agreement with all four-year programs, including the University of Iowa.
- On June 28, 2011, seven faculty and one administrator participated in an Iowa Agriculture Articulation work session held during the Iowa Association of Agriculture Educators Conference in Ankeny. The following discipline areas within agriculture were the focus of the work session – Agriculture Business, Agronomy, Animal Science, and Horticulture. Representatives from Iowa's community colleges, private colleges, and Iowa State University College of Agriculture reviewed common course competencies, common course alignment, trends, and issues within the subject matter. Several sectors have developed lists to continue discussion beyond the work session. A one-day work session to continue articulation efforts within Agricultural Sciences is planned for June 2012.
- There is a new articulation agreement with UNI for students who transfer to the Geography department to earn a BS degree in GIS.

- In August 2010, there was a meeting with a representative from the University of Iowa to discuss articulation. The proposal was reviewed by an undergraduate committee in August 2011 but no decision was made. There is a tentative meeting on November 30, 2011 in Iowa City to continue the discussion.
- A Marketing faculty member attended a joint meeting between the community colleges and the Regent universities in February 2010 to discuss Marketing. The focus was Principles of Marketing – MKT 110. During Summer 2010, each college completed a survey of the course content and the results were shared with the group in Fall 2010.
- During 2010-11, an Apparel Merchandising faculty member communicated with ISU faculty to assure the continued transferability of the Apparel Merchandising AAS degree.
- In Summer 2010, faculty and staff from the Graphic Communication Technology program at UNI visited Kirkwood. Faculty from Kirkwood and UNI discussed changes in technology and curriculum with the goal of updating the formal articulation which was signed in 2005. At this time, there has been no formal revision to the articulation agreement. Coordinators from Kirkwood and UNI are planning to meeting in Fall 2011 to facilitate an updated articulation or transfer plan for Graphic Communication Technology.
- Signed program to program articulation agreement with ISU for Early Childhood Education.
- Signed program to program articulation agreement with UNI for Criminal Justice.
- There was faculty to faculty discussion with the University of Iowa College of Education undergraduate program on education careers.
- Kirkwood participates in the statewide agreement with the BAS program and the AAS degree programs.
- There is an articulation agreement with UNI's Technology Management BA program and the following areas – Agricultural Tech; Auto Tech; CAD/MET; CNC; Construction Management; EET; IMT; Telecommunications; Water Environmental Tech; Welding; and Fire Science Career Option.
- CAD/MET and CNC also articulate to the BS Manufacturing Technology program at UNI.
- EET articulates with the Electrical and Information Engineering Technology BS program at UNI.
- Kirkwood is in discussion with UNI regarding an articulation agreement between the Construction Management AAS and UNI's Construction Management program.
- Biology faculty participated in the development of the Biological Sciences Transition Guide. Conversations continue between faculty at Kirkwood and faculty at the Regent universities.

### **Des Moines Area Community College**

- Advisors attend transfer advisor workshops at UNI, ISU, and U of I
- Attend statewide articulation conference
- Attend APP Advisor Day at ISU
- ISU Discover Engineering Days (3 separate events) - Ankeny
- ECE articulation created with Upper Iowa University, Drake University, and ISU
- College Transfer Fair-Ankeny Campus-attended by UNI, ISU, and U of I each fall & spring term
- DMACC sends new course and program information to UNI, ISU and U of I annually
- UNI 2+2 Elementary Education program at Ankeny, Boone and Carroll Campuses
- Participated in the statewide Early Childhood articulation discussions
- Hosted the statewide Agriculture articulation discussion
- Participated in the statewide Criminal Justice articulation discussion
- Participated in the statewide marketing articulation discussion
- Participated in the statewide communication articulation discussion

- Math faculty participated in discussion with ISU regarding remedial math courses for underprepared students
- Articulation agreement with ISU for Sports Management
- Articulation agreement with ISU on Interpretation
- Discussion with ISU Engineering faculty concerning basic Engineering Program

#### **Western Iowa Tech Community College**

- Discussion with the University of Iowa and Iowa community colleges related to BSN articulation.
- Discussion with the University of Iowa related to programs that transfer to Iowa's Bachelor of Applied Studies program.
- Participated in Criminal Justice articulation meetings.
- Participated in the development of the Biological Sciences Transition Guide.
- Participated in ISU's Iowa Community College meeting.
- Hosted two transfer days.
- Participated in LACTS meeting.

#### **Iowa Western Community College**

- Participated in the statewide transfer articulation conference at DMACC-Newton in February 2011; Communications, including speech.
- Participated in the statewide Agriculture faculty to faculty meeting at DMACC-Ankeny in June 2011.
- Participated in the statewide Criminology/Criminal Justice articulation faculty to faculty meeting at UNI in September 2011.
- Participated in the development of the Biological Sciences Transition Guide.
- Attended ISU's Fall 2010 Articulation Update Conference.
- College Transfer Fairs – Council Bluffs; attended by ISU, SUI, and UNI each fall and spring semester.
- New host site for the Southwest Iowa Regents Resource Center.

#### **Southwestern Community College**

- Southwestern Community College faculty and staff participated in the statewide articulation conference at DMACC in Newton in February 2011 with all three Regent schools. Discipline specific articulation topics included: composition, speech, general biology, anatomy and physiology and microbiology.
- In August 2011, SWCC faculty and staff traveled to ISU to discuss articulation within the college of fine arts and design, particularly integrated studio arts.
- In September 2011, SWCC personnel participated in the criminal justice meeting at UNI to discuss with the Regents, information about their criminal justice programs and transferability.
- SWCC participated in ISU's fall 2011 Articulation Update Conference.
- SWCC participated in the statewide faculty to faculty agriculture articulation meeting at DMACC in June 2011.

### Indian Hills Community College

- ISU Department of Food Science and Human Nutrition articulation of the Culinary Science major at ISU with an Associate of Science degree program in Pre-Culinary Science.
- ISU Department of Culinary Science, Dietetics, Food Science, and Nutrition Science degree programs articulation with the Pre-Food Science and Human Nutrition Focus Area at Indian Hills Community College.
- We have an articulation agreement with UNI for our Geospatial Technology program.

### Southeastern Community College

- SCC participated in an English and Biology faculty discussion with UNI, ISU, and UI at DMACC-Newton as part of an annual articulation event hosted in part by the state community college arts and sciences administrators.
- SCC Biology faculty were part of initial discussions related to a state transfer document – a Transition Guide.
- As part of the S-STEM initiative, SCC worked with the University of Iowa to develop a transfer guide for pre-Engineering students.
- In September 2010, SCC signed an agreement with the University of Iowa, which offers students the opportunity to complete one (1) of two (2) bachelor degrees.
  1. Bachelor of Applied Studies with five (5) tracks
    - General Studies
    - Human Relations
    - Nonprofit Management
    - Entrepreneurial Management
    - Political Science
  2. Bachelor of Liberal Studies
- SCC worked to update agreements in Electronics Technology with Iowa State University and the University of Iowa.
- Discussion with ISU Graphic Arts and SCC Animation programs pending.
- Began updates on Career Program agreements with UNI.

ATTACHMENT E

**Systematic Process for Expansion of Faculty to Faculty Academic Discipline Meetings**

*Approved by the Community College Chief Academic Officers and*

*Regent University Council of Provosts*

*October 8, 2010*

HF 815 (a bill for an act relating to articulation agreements between public postsecondary institutions and to the dissemination of articulation information) requires the Board of Regents to “develop, in collaboration with the boards of directors of the community colleges, a systematic process for expanding academic discipline meetings between the community college faculty and the faculty of the institutions of higher education governed by the board.” (Effective July 1, 2009)

In response to HF 815, the Liaison Advisory Committee on Transfer Students (LACTS) proposed the following systematic seven step process to enhance and expand faculty to faculty academic discipline meetings in the areas of arts and sciences and career and technical education. The process was created, with the intent, to ensure that:

- Stakeholders are meeting and moving forward on a regular basis
- Results are monitored and reviewed
- Calendar is regularly updated and made available in a central location
- Statewide process is regularly evaluated and improved for the future
- Processes are proactive and reactive, as appropriate for maximum benefit
- Faculty to faculty communications are ongoing and sustainable
- Process is institutionalized and supported by all Iowa community colleges and public universities

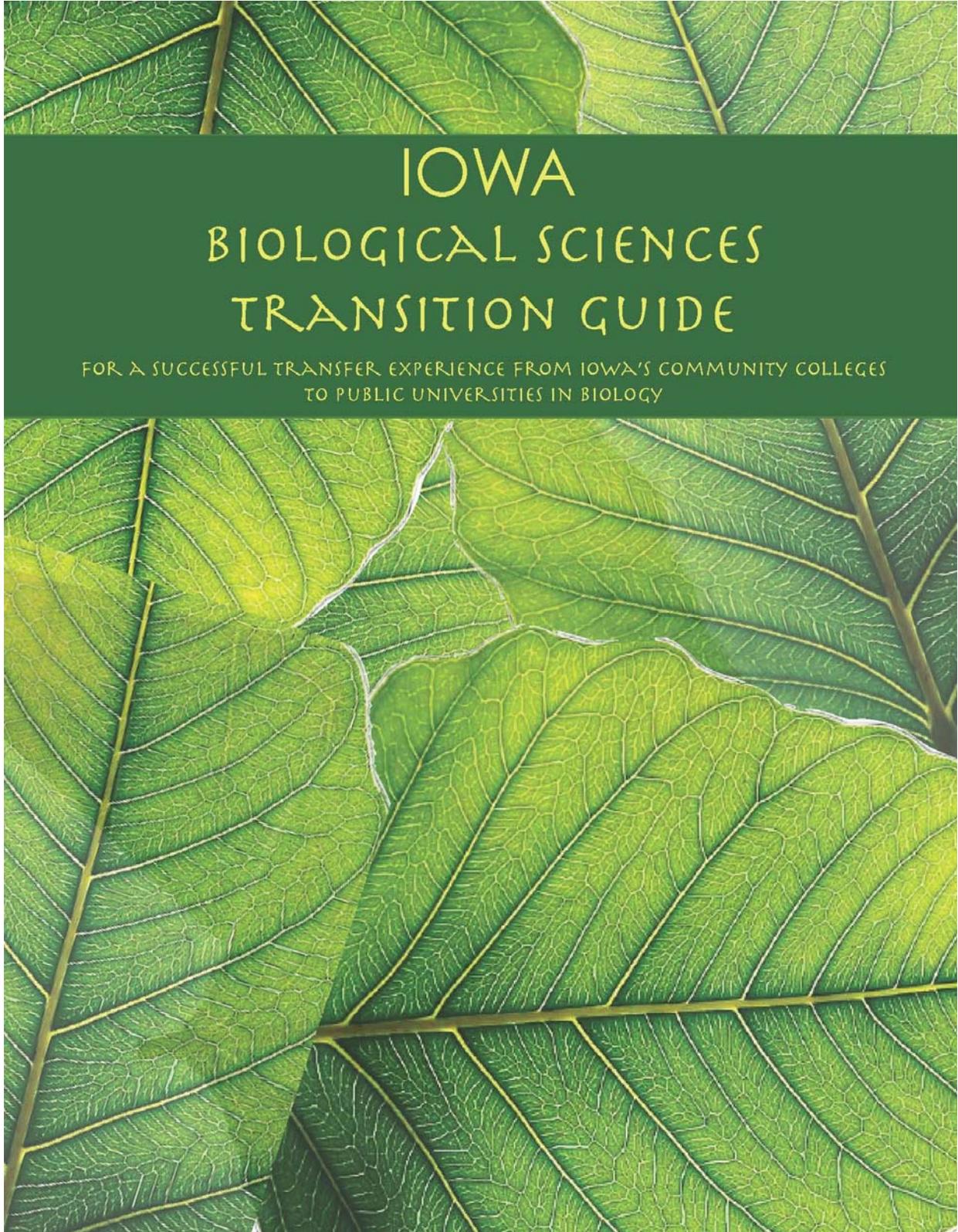
**STEPS FOR EXPANSION OF FACULTY TO FACULTY ACADEMIC DISCIPLINE MEETINGS:**

1. **DECIDE PROGRAM/DISCIPLINE PRIORITIES** – To determine priorities, with substantial input from other stakeholders, the Liaison Advisory Committee on Transfer Students (LACTS) will examine workforce development needs, market demand, program alignment issues, number of potential students impacted, and results from articulation inventories and faculty to faculty discipline discussions. LACTS will prepare a list of recommended programs/disciplines on which to focus for the coming 1-2 academic years. LACTS will submit this list for input from the Career & Technical Education (CTE) Deans, the Arts & Sciences (A&S) Deans, and the Regents Committee on Educational Relations (RCER). Then LACTS will submit the list for approval from their governance bodies: the Community College Chief Academic Officers (CAOs), the Community College Presidents, and Council of the Provosts of the Regent universities.
2. **CREATE CALENDAR** – LACTS will propose a calendar for faculty to faculty meetings, where possible will combine with and/or leverage other statewide meetings of A&S Deans, CTE Deans, Community College CAOs, LACTS, or other groups with an interest in articulation. Community College and Regents academic leadership will approve the calendar. LACTS will publish the calendar on the Board of Regents and Iowa Department of Education websites.

3. **JOINTLY PLAN THE MEETING** – Faculty representatives from Iowa community colleges and public universities shall comprise the planning committee. The faculty planning committee should work together to determine the agenda, identify a knowledgeable facilitator, and establish outcomes. Possible outcomes, for which faculty would be responsible for developing and/or sustaining, may include:
- Course alignment
  - Transition guides
  - Equivalency guides
  - Articulation agreements, course-to-course or program-to-program
  - New degree pathways
  - AAS and career technical articulation agreements
  - Stronger relationships among faculties from the public universities and the community colleges
  - Continued meetings and progress toward these outcomes

To assist in the planning, LACTS will establish best practice guidelines for planning a discipline meeting and provide a Community College and Regents resource person for each statewide meeting. Administrative and funding support for managing meeting communications, registration, and logistics (location, parking, catering, etc.) will need to be identified for groups involved in planning and delivering an academic discipline meeting.

4. **CONDUCT THE MEETING AND CREATE THE FOLLOW UP PLAN** – The faculty, with support from LACTS, will conduct the academic discipline meeting and record minutes. The record of the proceedings should include any action items and next steps, along with target dates/deadlines and responsible parties.
5. **REPORT ON MEETING OUTCOMES** – The faculty planning committee should communicate any future meeting expectations and the plan for monitoring progress on all actionable items to the meeting attendees, LACTS, and other identified stakeholders.
6. **EVALUATE THE DISCIPLINE MEETING AND EVALUATE THE SYSTEMATIC PROCESS** – LACTS will identify and make available a process by which to evaluate the various faculty to faculty discipline meetings. The evaluative process shall be both informative and simple to use. The faculty planning committee, in cooperation with their LACTS resource persons, will be responsible for administering the evaluation and collecting feedback at their respective meeting.
- LACTS will be responsible for creating a method by which to evaluate the systematic process for expanding academic discipline meetings to determine if the process is working and to identify opportunities for improving the process.
7. **SUSTAIN THE PROCESS** – LACTS recognizes that sustaining the process requires the process be “institutionalized”. The process needs to be adopted, supported and administered by those at the community colleges and public universities in the State of Iowa committed to articulation.





## Preamble

*Innovation in life science will be the major driver of meeting four major societal challenges: challenges of climate, challenges of food, challenges of energy, and challenges of health.<sup>1</sup>*

-Phillip Sharp, co-chair of the National Academy of Sciences New Biology for the 21st Century committee and professor of Biology, MIT

In the year 2010, 2,477 biology majors\*, prospective solvers of some of society's greatest challenges and mysteries, entered Iowa's public universities. Of that total, 72.1 percent (1,787) were incoming freshmen, and 27.9 percent (690) were transfer students who had already completed college coursework or degree programs - chiefly from Iowa's community colleges. The number of students transferring to Iowa's public universities to study in the biological sciences is on a steady annual increase, growing by 111 students from 2009 to 2010. Common preparatory pathways for transferring to university biology programs from community colleges continue to grow as well. For example, 1,000 more students were degreed in the health science cluster at Iowa community colleges in 2010 than in 2009.<sup>2</sup> Transfer students make up an increasing proportion of biology majors at Iowa's public universities. However, indicators suggest that incoming biology majors who are transfer students are more likely to encounter barriers to success than are students who enroll as freshmen at Iowa's public universities. The fact that a significant proportion of Iowa's potential life scientists are prone to struggle at the point of transfer is a rallying call for collaboration among community college and university faculty, advisors, mentors and all who impact student success to find solutions.

Besides our moral imperative to meet learner needs, the biological sciences hold an economic key to Iowa's and the nation's future. According to the 2011 report "Realizing Iowa's Bioscience Potential" prepared for Innovate Iowa by the Battelle Technology Partnership, jobs in Iowa's bioscience sector grew 26 percent between 2001 and 2008, outpacing the national growth rate of 15.8 percent. Iowa's bioscience industry sector directly employed about 14,500 professionals across 525 business establishments in 2008 and employment grew 4.5 percent during the recession period of 2007 and 2008. The average annual wage paid by the bioscience sector in Iowa was



\$60,833 in 2008, more than \$24,000 or 67 percent above the overall wage paid in the private sector.<sup>3</sup> This is a resilient, growing, quality employment sector for Iowa necessarily fueled by a continuous talent pipeline of newly-educated graduates in the biological sciences. But the pipeline leaks.



Our universities' two-year retention rates for entering freshmen are on average approximately 12.4 percent higher than the retention rate for transfer students majoring in biology (81.0 percent compared to 68.6 percent, 2004 data). The grade point average after first semester on campus is 0.29 higher on average for university freshmen versus transfer biology majors (2.95 to 2.66, 2010 data). And, the six-year graduation rate from the date of arrival on campus is 8 percent higher for university freshmen versus transfer biology majors (68.1 percent compared to 60.1 percent, 2004 data). Many variables contribute to these discrepancies, yet some barriers to success are clearly within the control of university and community college faculty, advisers, mentors and students themselves. This Biology Transition Guide, authored by and for community college and university instructors and advisors and their students, is intended as a tool to help each of those stakeholders to manage a successful transfer experience. Our students deserve it. Our state depends on it.

*\*Biology majors as defined in the Biology Transition Guide refers to majors requiring one or both courses of the Introductory Biology sequence at one of Iowa's public universities. A complete list of those majors appears in Section B.*

## ABOUT THIS GUIDE

**Section A** is an explanation of basic understandings and a representational list of key biological principles to be possessed by the transfer student upon arrival to the university, on page 3.

**Section B** is a listing of the life science majors available at Iowa's public universities, and the career areas to which those majors lead, on page 12.

**Section C** is a series of advisories for students and instructors to ensure a successful transfer experience, on page 15.

**Section D** is a "to do" list for the transfer student upon arrival at the university to help ensure a successful academic experience, on page 16.

**Information and Resources** directs the user to further background materials and individuals involved in this production, on page 18.

## SECTION A

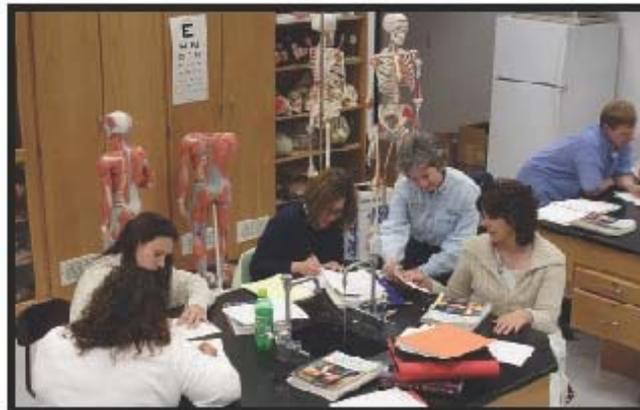
### Foundational Understandings Expected after Successful Completion of the Introductory Biology Sequence

To the Student:

The primary aim of an Introductory Biology course sequence is not simply to expose students to many separate and disconnected terms and concepts. Although many “facts” are encountered in these courses, the primary goal of the introductory sequence is to develop comprehension and understanding of the general principles that shape properties of living systems. As a student studying Introductory Biology, you are expected to reach a level where you are able to demonstrate your understanding by using the facts and concepts that you learn to clearly explain these principles and properly apply them in relevant situations.

Measuring a person’s understanding poses a significant challenge - even to the person learning the subject. Recognition that you “understand” something is difficult, but also an important skill to possess. Tasks involving the application of knowledge can be used to monitor understanding of a subject, such as explaining a concept within an appropriate context, or applying a concept to a novel situation. Your ability to build upon the foundational knowledge acquired through the Introductory Biology course sequence will be critical to your success in future upper-level courses. As scientists, we continually question and challenge the current body of knowledge in order to advance the discipline of biology. The goal of higher education is to instill in you those scientific habits of mind.

Recognition that you “understand” something is difficult, but also an important skill to possess.



## Foundational Concepts



The Introductory Biology curriculum at Iowa's community colleges, private colleges and public universities varies in emphasis regarding themes, order and progression, and depth of coverage of topics. Such variation reflects the unique educational missions and strengths of each institution. Although there is broad consensus on the core topics of this Biology Transition Guide, an important variation for the student to be aware of is the distribution of topics into the first and second courses in the introductory sequence. **It is, therefore, strongly recommended that students complete an entire introductory course sequence at a single institution prior to transferring institutions, and that students meet with departmental advisors at the new institution prior to taking these courses, if possible, to discuss transfer of these course credits.**

The Introductory Biology curriculum generally covers seven core subject areas: Chemistry of Life, Cells, Genetics, Evolution, Biodiversity, Organism Form and Function, and Ecology. Moreover, the presentation of these subjects emphasizes, and laboratory exercises reinforce, scientific inquiry as the basis for acquiring knowledge in these subjects.

The Biology Transition Guide provides a list of examples of the type of knowledge and some potential applications expected of a student following completion of an Introductory Biology course sequence. While these examples span the breadth of subject areas in the Introductory Biology curriculum, this outline is only intended as a representation of the content of each area and should not be considered a comprehensive list of the content covered in an Introductory Biology curriculum.

I. The Chemistry of Life: Organisms interact with their environments, exchanging matter and energy

**Concept:** Rules of chemistry apply to biomolecular interactions in cells.

**Application:** Explain the distinct roles of covalent and hydrogen bonding in the structure of the DNA helix.

**Concept:** Chemical interactions with water molecules influence the three-dimensional structures of macromolecules, macromolecular assemblies, and lipid membranes. **Application:** Explain how interactions with water influence the shape of a protein that is partially embedded in a plasma membrane.

**Concept:** The oxidation of carbon fuels is an important source of cellular energy. **Application:** Given a cellular redox reaction, diagram what happens to (a) the atoms and (b) the energy in chemical bonds.

II. Cells: The organism's basic unit of structure and function is the cell

**Concept:** Common features are shared by a variety of cell types, while important differences distinguish unique cell types. **Application:** Identify similarities and differences between prokaryotic and eukaryotic cells, and between animal and plant cells.



**Concept:** Membranes maintain cell structure and intracellular organization, while facilitating molecular transport and intercellular communication.

**Application:** Distinguish between diffusion and osmosis across the cell membrane. Illustrate the subcellular compartmentalization in eukaryotic cells.

**Concept:** Chemiosmosis couples electron transport to ATP synthesis. **Application:** Generate diagrams to compare and contrast the establishment of a chemiosmotic gradient in chloroplasts and in mitochondria for the production of ATP.

**Concept:** Photosynthesis converts light energy to chemical energy. **Application:** Diagram the flow of energy through photosynthesis, from sunlight to the production of the first product of photosynthesis (a three-carbon sugar).

III. Genetics: Continuity of life is based on heritable information in the form of DNA



**Concept:** Genetic information is coded in DNA and expressed through transcription of RNA, which may be translated into proteins that accomplish much of the work in the cell. **Application:** Explain how a mutation in a single tRNA anticodon would impact protein synthesis in a cell. **Application:** Explain how a change in DNA sequence through mutation can cause a change in form (such as plant height) or a disease (such as cystic fibrosis).

**Concept:** Mendel's Laws of Heredity arise from chromosome behavior in meiosis and predict patterns of inheritance in sexual organisms as a function of dominant and recessive alleles. **Application:** Predict genotype and phenotype ratios in progeny of controlled crosses involving genes with two alleles. **Application:** Compute map distances between different genes based upon progeny of testcross.

**Concept:** In a multicellular organism, the cellular genome is replicated during cell division by mitosis, but individual cells can have dramatically different forms. **Application:** Explain in general terms how cells in the same organism can contain the same DNA sequence information but produce different proteins.



IV. Evolution: Mechanisms that generate the unity & diversity of life



**Concept:** An organism's phenotype influences its ability to survive and reproduce. **Application:** Contrast the process of artificial selection in domesticated animals and plants with the process of selection in nature.

**Concept:** Allele frequencies determine genotype frequencies in a population, and evolutionary forces (e.g., mutation, genetic drift and natural selection) change genetic composition of populations each generation. **Application:** Describe the patterns of change in frequencies of alleles, genotypes and phenotypes as a result of positive Darwinian selection favoring a new mutation in a population. Crop domestication or antibiotic resistance may be suitable examples.

**Concept:** Evolution requires genetic variation. Genetic variation arises from mutation and is shuffled by recombination of chromosomes during sexual reproduction. **Application:** Explain why genetic variation is necessary for the persistence of a species.

**Concept:** Homology reflects common ancestry; shared derived characteristics of homologous features reveal evolutionary relationships among organisms. **Application:** Interpret evolutionary relationships and patterns represented in a phylogram.

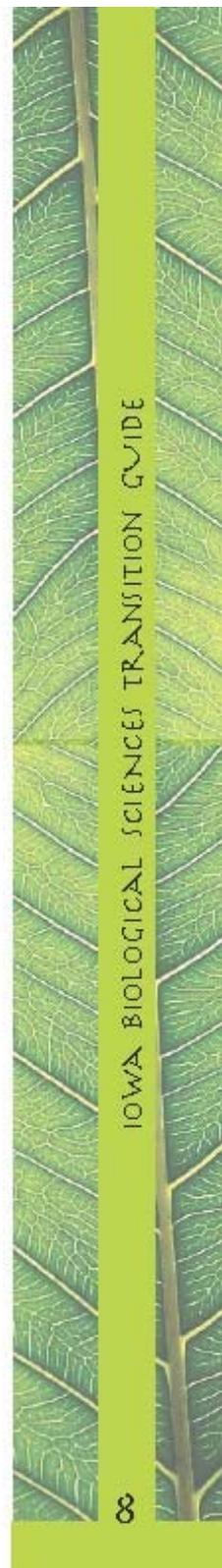
V. Evolutionary History of Biodiversity: Living groups of organisms diversified from common ancestors

**Concept:** Free-living organisms on earth are organized into three major domains (Bacteria, Archaea and Eukarya), which evolved from a single common ancestor. **Application: Compare and contrast the major characteristics of Bacteria, Archaea and Eukarya.**



**Concept:** Our understanding of the diversity of life is still incomplete. Previously undescribed species are discovered every year and the evolutionary relationships among groups of organisms are still under investigation. **Application: Would you expect that more species of mammals or nematodes remain to be named? Why?**

**Concept:** Endosymbiosis contributed to the subcellular complexity of the eukaryotic cell. **Application: Contrast the evolutionary relationship between the chloroplast, the nucleus of a plant cell, and the cyanobacteria.**



VI. Organism Form and Function: Systems coordinate homeostasis, defense, reproduction, development, and sensing the environment

**Concept:** Development involves progressive determination of parts, based on inductive interactions. **Application:** Contrast the concepts of “fate” and “determination” and describe experimental approaches that distinguish between the two. **Application:** Explain, using an example, how embryonic induction brings about determination.

**Concept:** Organ systems are responsible for gas exchange, water balance, nutrient and water transport, growth, reproduction, and response to changes in the internal and external environment. **Application:** Contrast the physiological and behavioral mechanisms that contribute to the maintenance of homeostasis in body temperature in mammals (endotherm) versus lizards (ectotherm). **Application:** In vertebrate animals, how does breathing contribute to cellular metabolic processes throughout the organism? The explanation should include the roles of the lungs, cardiovascular system, cellular mitochondria, and gas and nutrient transport across membranes.

**Concept:** Nerve impulses are based upon traveling waves of reversals of electrical potential across neuronal membranes. **Application:** Explain how sequential opening and closing of voltage gated sodium and potassium channels initiate and terminate action potentials.

**Concept:** The gastrula stage of animal development establishes three primary germ layers that each contribute to distinct structures in the adult. **Application:** Explain the role of fate mapping as a technique that is used to distinguish cell lineages. **Application:** Predict the results of a fate mapping experiment in which individual cells are labeled during gastrulation. What differentiated cell types might arise from cells of each germ layer?



**Concept:** Plant development is generally characterized by indeterminate growth, while animal organ systems and body plans are established during embryogenesis.

**Application:** What cell type allows plants to continue to generate new organs? Explain how a dicot like a carrot can be regenerated from just a few differentiated root cells while cloning of a mammal requires the use of an egg cell.



**Concept:** Plant and animal hormones regulate development and responses to internal and external stimuli.

**Application:** Compare and contrast the chemical properties and regulatory effects of the animal hormone estradiol with the plant hormone auxin.

## VII. Ecology: Organisms interact with and affect their environments

**Concept:** Spatial distribution of species, and individuals within species, reflect interactions with the abiotic environment in addition to positive/negative relationships within biotic communities.

**Application:** Describe a biome of Iowa and identify major abiotic and biotic factors that influence species composition. Under the biotic factors, please include types of species interactions and how these affect spatial distribution of species.

**Concept:** Populations with a positive per capita rate of increase ( $r$ ) have the capacity for exponential growth, limited by carrying capacity ( $K$ ).

**Application:** Describe potential constraints on population growth.

**Concept:** Our ecosystem is shaped by the diversity of life.

**Application:** Predict changes to our ecosystem and to our agriculture that would occur if we eradicated all bacteria from our soil.

**Concept:** Energy flow and carbon/nitrogen cycles sustain ecosystems.

**Application:** Compare and contrast the roles of trees and humans in the carbon cycle.

## *Laboratory Skills in the Biological Sciences*



Laboratory activities constitute a major component of the Introductory Biology courses at Iowa's public universities. These activities demonstrate experimental approaches to biological discovery while allowing students to gain hands-on experience with different tools and skills. Introductory Biology courses with on-line lab modules, or altogether without a lab, may not offer an equivalent experience. The list below describes skills, experiences and familiarities gained through laboratory

activities in Introductory Biology. These basic proficiencies are expected upon entering upper-level laboratory courses, or before pursuing individual research projects.

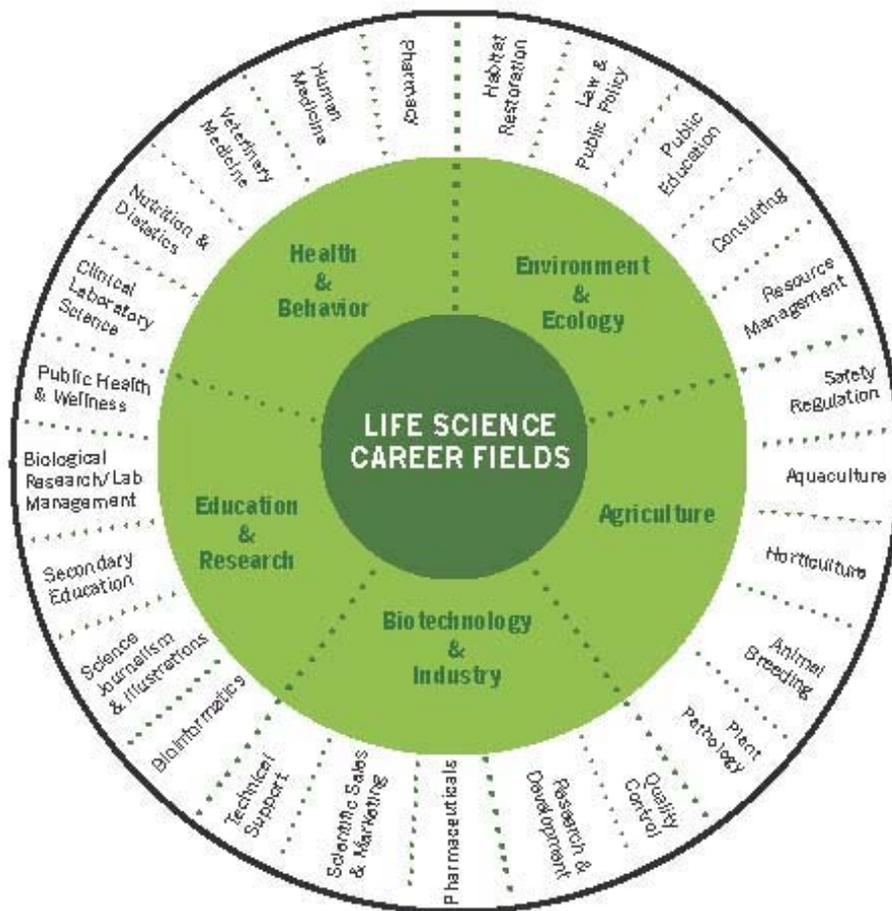
### **Skills, experiences and familiarities gained in the Introductory Biology Laboratory:**

1. Locate information relevant to experimental procedures.
2. Accurately record and describe data obtained.
3. Analyze, graph, and calculate simple statistics with data.
4. Identify possible sources of experimental error.
5. Evaluate the accuracy and precision of data.
6. Interpret the meaning of experimental results.
7. Be competent in the use of both compound and dissecting microscopes.
8. Properly use pipettes, balances and centrifuge.
9. Operate a micropipettor and load an electrophoresis gel.
10. Be competent in basic dissection skills.
11. Accurately convert different units of measurement, such as solutions and perform dilutions.
12. Understand the basic concept of sterile conditions.
13. Be familiar with procedures for handling biohazardous material and realize the potential dangers of improper disposal.
14. Understand the importance of standard safety precautions in the laboratory.
15. Familiarity with other tools of the modern biology laboratory is a plus, including centrifuge, spectrophotometer, dissolved oxygen meter, pH meter, conductivity meter, colorimeter, protein analyzer and thermocycler.

## SECTION B

### Biology-Related Majors and Career Fields

Career fields in the life sciences are vast and varied. Students should consider a career field they desire to pursue, then select a major that will prepare them for that field. Rarely does a specific major lead to one singular career option. Multiple fields of study may lead to similar career fields, and conversely, a single major may lead to multiple career options. Each major has core course requirements along with curriculum options to provide emphases in particular areas.



## Biology-Related Majors at Iowa's Public Universities

All majors for which one or both courses of the Introductory Biology sequence are required

### UNIVERSITY OF NORTHERN IOWA LIFE SCIENCE-RELATED MAJORS:

- Biochemistry  
[www.uni.edu/chemistry/majors-minors.html](http://www.uni.edu/chemistry/majors-minors.html)
- Bioinformatics  
[www.cs.uni.edu/overview\\_bioinformatics.php](http://www.cs.uni.edu/overview_bioinformatics.php)
- Biology  
[www.biology.uni.edu](http://www.biology.uni.edu)  
Biomedical emphasis  
Ecology & Systematics emphasis  
Microbiology emphasis  
Plant Bioscience emphasis  
Biotechnology emphasis
- Health Promotion: Environmental Health  
[www.uni.edu/catalog/environmental-health](http://www.uni.edu/catalog/environmental-health)
- Biology Teaching  
[www.science-ed.uni.edu/undergrad/maj-bio.htm](http://www.science-ed.uni.edu/undergrad/maj-bio.htm)
- All Science Teaching  
[www.science-ed.uni.edu/undergrad/maj-sci.htm=allsci](http://www.science-ed.uni.edu/undergrad/maj-sci.htm=allsci)
- Middle/Junior High Science Teaching  
[www.science-ed.uni.edu/undergrad/maj-sci.htm=middlejunior](http://www.science-ed.uni.edu/undergrad/maj-sci.htm=middlejunior)
- Biotechnology  
[www.uni.edu/catalog/biotechnology](http://www.uni.edu/catalog/biotechnology)

### UNIVERSITY OF IOWA LIFE SCIENCE-RELATED MAJORS:

- Applied Physics  
[www.physics.uiowa.edu/undergrad](http://www.physics.uiowa.edu/undergrad)
- Biochemistry  
[www.biochem.uiowa.edu](http://www.biochem.uiowa.edu)
- Biology  
[www.biology.uiowa.edu](http://www.biology.uiowa.edu)  
Cell & Developmental Track  
Comprehensive Track  
Evolutionary Biology Track  
Genetics & Biotechnology Track  
Neurobiology Track  
Plant Biology Track
- Biomedical Engineering  
[www.engineering.uiowa.edu/~bme](http://www.engineering.uiowa.edu/~bme)
- Clinical Laboratory Science  
[www.medicine.uiowa.edu/CLSP](http://www.medicine.uiowa.edu/CLSP)
- Environmental Sciences  
[www.uiowa.edu/~envsci](http://www.uiowa.edu/~envsci)  
Bioscience Track  
Geosciences Track  
Hydrosciences Track  
Chemical Science Track
- Human Physiology  
[www.uiowa.edu/~hph](http://www.uiowa.edu/~hph)
- Informatics  
[www.cs.uiowa.edu/Informatics/BioinformaticsCognate.html](http://www.cs.uiowa.edu/Informatics/BioinformaticsCognate.html)
- Microbiology  
[www.uiowa.edu/microbiology](http://www.uiowa.edu/microbiology)
- Science Education  
[www2.education.uiowa.edu/scied/default.aspx](http://www2.education.uiowa.edu/scied/default.aspx)



IOWA STATE UNIVERSITY LIFE SCIENCE-RELATED MAJORS:

- Agricultural Studies  
[www.aged.s.iastate.edu/undergrad/agstudies.htm](http://www.aged.s.iastate.edu/undergrad/agstudies.htm)
- Agriculture & Life Sciences Education  
[www.aged.s.iastate.edu/undergrad/agedcert.htm](http://www.aged.s.iastate.edu/undergrad/agedcert.htm)
- Animal Ecology  
[www.nrem.iastate.edu/students/majors.php](http://www.nrem.iastate.edu/students/majors.php)
- Animal Science  
[www.ans.iastate.edu/stud/ugrad/index.php](http://www.ans.iastate.edu/stud/ugrad/index.php)
- Biochemistry  
[www.bmb.iastate.edu/index.php](http://www.bmb.iastate.edu/index.php)
- Bioinformatics and Computational Biology  
[www.las.iastate.edu/bcbio](http://www.las.iastate.edu/bcbio)
- Biological & Pre-Medical Illustration  
[www.bpmi.iastate.edu](http://www.bpmi.iastate.edu)
- Biology  
[www.biology.iastate.edu](http://www.biology.iastate.edu)
- Biophysics  
[www.bmb.iastate.edu/index.php](http://www.bmb.iastate.edu/index.php)
- Chemical and Biological Engineering  
[www.cbe.iastate.edu/academics/undergrad-major.html](http://www.cbe.iastate.edu/academics/undergrad-major.html)
- Culinary Science  
[www.fshn.hs.iastate.edu/ugrad/culinary.php](http://www.fshn.hs.iastate.edu/ugrad/culinary.php)
- Dairy Science  
[www.ans.iastate.edu/stud/ugrad/index.php](http://www.ans.iastate.edu/stud/ugrad/index.php)
- Diet & Exercise  
[www.hs.iastate.edu/dietandexercise](http://www.hs.iastate.edu/dietandexercise)
- Dietetics  
[www.fshn.hs.iastate.edu/ugrad/dietetics.php](http://www.fshn.hs.iastate.edu/ugrad/dietetics.php)
- Environmental Science  
[www.ensci.iastate.edu/undergrad/index.htm](http://www.ensci.iastate.edu/undergrad/index.htm)
- Food Science  
[www.fshn.hs.iastate.edu/ugrad/foodsci.php](http://www.fshn.hs.iastate.edu/ugrad/foodsci.php)
- Forestry  
[www.nrem.iastate.edu/students/majors.php](http://www.nrem.iastate.edu/students/majors.php)
- Genetics  
[www.public.iastate.edu/~ugradgen](http://www.public.iastate.edu/~ugradgen)
- Horticulture  
[www.hort.iastate.edu/programs/academic-programs.html](http://www.hort.iastate.edu/programs/academic-programs.html)
- Kinesiology  
[www.kin.hs.iastate.edu/undergrad](http://www.kin.hs.iastate.edu/undergrad)
- Microbiology  
[www.micro.iastate.edu/ugrad/ugrad.html](http://www.micro.iastate.edu/ugrad/ugrad.html)
- Nutritional Science  
[www.fshn.hs.iastate.edu/ugrad/nutritional.php](http://www.fshn.hs.iastate.edu/ugrad/nutritional.php)

**Special Advisory: Pre-Health Students**

Pre-health programs are not majors in and of themselves; they are a set of core courses that need to be completed before graduating with your Bachelor's degree. "Pre-health" is a designator for students who wish to apply to professional schools in the health sciences. These health sciences typically include pre-chiropractic, pre-dentistry, pre-medicine, pre-optometry, pre-physical therapy, pre-physician assistant, pre-podiatry, and pre-veterinary medicine. Pre-health core courses, required by the specific professional program, provide a foundation and preparation for the professional school curriculum. The majority of these core courses are naturally part of any science major, so most science majors will include many, if not all, of these pre-health core courses. See page 12 of the Biology Transition Guide for a listing of the different science areas. In terms of choosing a major, most health programs do not prefer any one major over another. Pre-health students should think about two different questions when deciding which major to complete as an undergraduate. The first question is "What subject do you like best?" Students tend to earn higher grades in subjects they are interested in. The second question students should answer is "What is your alternate plan if you decide to do something other than what you originally chose?" The answers to these questions will help you decide what major is best for you.

## SECTION C

## Advice for Instructors and Students

**To University Instructors:** Most transfer students from Iowa's community colleges will be well-prepared for success, having chosen the transfer pathway for a variety of reasons. These reasons include the desire to save money, to stay close to home, to start out with individualized instruction in smaller classes, and so on. Moreover, community college students are typically accustomed to instructors whose offices are easy to find and help is easily accessed. Transfer students may be a bit intimidated by the scale of the university and the relative detachment between students and faculty. They will benefit from explicit instructions as to how to access your time. Often, community college learning center facilities with faculty present are available for walk-in appointments for tutoring in any subject. Transfer students (as with all students) should be informed as to the availability of tutors and/or learning centers on campus. Feedback on assignments and grade updates are often swift at community colleges due to small class sizes. Let students know when they should expect results of evaluations and where and how they can access that information.



**To Students:** There's always something you could and should be doing for a course - even if there's not a specific assignment due. For example, keep up with all reading assignments, or review material and summarize content following each lecture. Make sure and follow directives on the course website. Also, be pro-active in identifying areas of difficulty and seeking assistance to clarify misunderstandings; it will be assumed you are satisfied with your performance unless you speak up.

Keep in mind that university professors have research and other responsibilities and can be difficult to access outside of class and scheduled office hours. Sometimes it might be best to catch your professor immediately before and after class, or through e-mail, to ask clarifying questions or schedule a meeting. Be sure to make use of TAs and supplemental instruction. Seek the help you need to be successful. One great strategy for support is to connect with other students. Form a study group with students in your lab or discussion section. If you have problems identifying interested students, ask the instructor to make an announcement at the beginning or end of class to identify other students interested in forming a study group, e.g., ask interested students to stay after class and exchange e-mail addresses. When it comes to grades, it may be typical that the majority of the grade in a university biology class is determined by scores of only a few exams, making a poor test score difficult to overcome. Make every effort to prepare for each exam, and if factors outside your control (e.g., illness) influence your readiness for an exam, inform the instructor of the course.

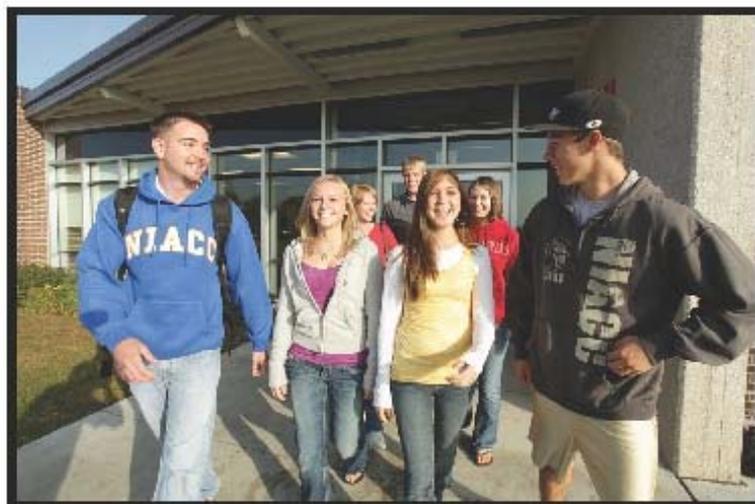
## SECTION D

### Checklist for the Student upon Transferring to a University

- ✦ Attend the **earliest possible Transfer Orientation session**. The longer you wait, the fewer course options you may have.
- ✦ Ask advisor about:
  - registration process
  - your degree audit and transfer credits
  - student clubs related to your dept/major/career interests
  - research opportunities on campus and in the community
  - transition courses and supplemental instruction services
  - opportunities to join a peer group of students that have also transferred from community colleges
- ✦ If you are employed during the semester try to work fewer hours. You will need to accomplish more out-of-class studying and participating in experiential opportunities.
- ✦ Become familiar with the services available online:
  - e-mail
  - access to course material and grades
  - course schedules
  - degree requirements
  - university calendar/deadlines
- ✦ Find out how to sign up for a tutor even if you don't think you'll need one.
- ✦ Write down all university academic deadlines in your student planner.
- ✦ Learn where everything is located on campus
  - buildings
  - advisors
  - classes
  - tutoring centers
  - health center
  - computer labs
- ✦ Create a binder or electronic folder to store all handouts and information relating to academic policies and advising.
- ✦ Look over department, college and university policies. Inquire if you have any questions.

It is strongly recommended that students complete an entire introductory course sequence at a single institution

- ☛ Look over materials from the science prerequisite courses for the course you will be taking at the university. Make sure you are comfortable with and knowledgeable of all the subject areas. If not, seek advice from advisors or the faculty in those courses about how you can bridge the gap.
- ☛ GO TO CLASS. Even IF the instructor won't know if you are there, it makes a DIFFERENCE.
- ☛ Get to know and exchange contact information with at least two people in every class that you are in.
- ☛ Approach instructors and/or teaching assistants with questions on material you find difficult to understand.
- ☛ Determine the office hours of each of your instructors and make a visit to each of them.
- ☛ Visit your career services office.
- ☛ Attend a department social event or research seminar.
- ☛ Attend a career fair.
- ☛ Keep in touch with your community college instructors. They may be good mentors and references even beyond your graduation.



## Information and Acknowledgments

### University of Northern Iowa (UNI)

- Academic Advising - <http://www.uni.edu/advising>
- Admissions - <http://www.uni.edu/admissions>
- Biology - <http://www.biology.uni.edu>
- Career Services - <http://www.uni.edu/careerservices>
- Center for Multicultural Education - <http://www.uni.edu/cme>
- Chemistry and Biochemistry - <http://www.uni.edu/chemistry>
- Department of Residence - <http://www.uni.edu/dor>
- Tutoring - [http://www.uni.edu/unitalc/tutoring\\_services\\_at\\_uni.pdf](http://www.uni.edu/unitalc/tutoring_services_at_uni.pdf)
- Transfers - <http://www.uni.edu/admissions/transfer>
- Science Education - <http://www.science-ed.uni.edu>

### Iowa State University (ISU)

- Academic Advising - <http://www.iastate.edu/students/acadhelp.shtml>
- Admissions - <http://www.admissions.iastate.edu/transfer>
- Agriculture and Life Sciences - <http://www.ag.iastate.edu>
- Biology - <http://www.biology.iastate.edu>
- Career Services - <http://www.career.iastate.edu>
- College of Engineering - <http://www.engineering.iastate.edu>
- Department of Residence - <http://housing.iastate.edu>
- Human Sciences - <http://www.hs.iastate.edu>
- Liberal Arts and Sciences - <http://www.las.iastate.edu>
- Transfer Information - <https://transit.iastate.edu>
- Tutoring - <http://www.dso.iastate.edu/asc/tutoring>

### University of Iowa (UI)

- Academic Advising - <http://www.uiowa.edu/web/advisingcenter>
- Admissions - <http://www.uiowa.edu/admissions/undergrad/transfer/index.html>
- Biochemistry - <http://www.biochem.uiowa.edu>
- Biology - <http://www.biology.uiowa.edu>
- Biomedical Engineering - <http://www.engineering.uiowa.edu/~bme>
- Environmental Sciences - <http://www.uiowa.edu/~envsci>
- Health and Human Physiology - <http://www.uiowa.edu/~hhp>
- Microbiology - <http://www.uiowa.edu/microbiology>
- Romantz Career Center - <http://www.career.uiowa.edu>
- Residence Halls - [http://housing.uiowa.edu/departments/reslife/academic\\_initiatives.html](http://housing.uiowa.edu/departments/reslife/academic_initiatives.html)
- Science Education - <http://www2.education.uiowa.edu/teach/scied/default.aspx>
- Tutoring - <http://tmu.uiowa.edu/tutor-referral-service>

### Iowa Community Colleges

- Northeast Iowa Community College - <http://www.nicc.edu>
- North Iowa Area Community College - <http://www.niacc.edu>
- Iowa Lakes Community College - <http://www.iowalakes.edu>
- Northwest Iowa Community College - <http://www.nwicc.edu>
- Iowa Central Community College - <http://www.iccc.cc.ia.us>
- Iowa Valley Community College - <http://www.iavalley.edu>
- Hawkeye Community College - <http://www.hawkeyecollege.edu>
- Eastern Iowa Community College - <http://www.eicc.edu>
- Kirkwood Community College - <http://www.kirkwood.edu>
- Des Moines Area Community College - <http://www.dmacc.edu>
- Western Iowa Tech Community College - <http://www.witcc.edu>
- Iowa Western Community College - <http://www.iwcc.edu>
- Southwestern Community College - <http://www.swcciova.edu>
- Indian Hills Community College - <http://www.indianhills.edu>
- Southeastern Community College - <http://www.sociowa.edu>

## Committee

### Iowa State University

- Jim Colbert, Associate Professor, Dept. of Ecology, Evolution & Organismal Biology
- Denise Hix, Academic Advisor, Biology Program
- Jim Holtz, Academic Advisor, Biology Program

### University of Iowa

- Lori Adams, Honors Advisor, Department of Biology
- Amy Korthank, Academic Advisor, Dept. of Biology
- Mark Holbrook, Lecturer, Department of Biology
- Bryant McAllister, Associate Professor, Dept. of Biology

### University of Northern Iowa

- Peter Berendzen, Associate Professor, Dept. of Biology
- Jeff Weld, Associate Professor, Dept. of Biology

### Des Moines Area

#### Community College

- Curtis Eckerman, Science Group Chair/Arts & Sciences, Biology Department

### Iowa Western

#### Community College

- Brian Berthelsen, Assistant Professor, Biological Sciences

### Kirkwood Community College

- Jill Scott, Professor, Biological Sciences/Genetics

### North Iowa Area

#### Community College

- Jason Friday, Division Chair, Natural Sciences
- Carol Schutte, Biology Instructor, Natural Sciences

### Northeast Iowa

#### Community College

- Linnae Scheffel, Life Sciences Instructor

## References

1. Vision and Change: A Call to Action (2009). A summary of recommendations made at the national conference organized by the American Association for the Advancement of Science with support from the National Science Foundation, July 15-17, 2009, Washington, DC. [www.visionandchange.org](http://www.visionandchange.org).
2. Iowa Department of Education (2010). The Annual Condition of Iowa's Community Colleges, 2010.
3. Battelle Technology Partnership (2011), Realizing Iowa's Bioscience Potential, <http://innovateiowa.org/content/iowa-Bioscience-Plan.pdf>



## Acknowledgments

❖ The financial support of Iowa Community College Chief Academic Officers and Iowa Public University Provosts

❖ Attendees to the Feb. 11, 2011 biology articulation meeting for their contributions and reviews

❖ University of Iowa Biology Enrollment Data: Tom Kruckeberg, Associate Registrar, University of Iowa

❖ Iowa State University Biology Enrollment Data: Jonathan Compton, Senior Research Analyst, Iowa State University

❖ University of Northern Iowa Biology Enrollment Data: Scott Busche, Program Assistant, Institutional Research, University of Northern Iowa

❖ Graphic Design: Tonja Richards, Communications Specialist, and Jacquelin Linn, student staff, Iowa Mathematics & Science Education Partnership





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Telephone: 319-273-2959 | Email: [imsep@uni.edu](mailto:imsep@uni.edu)

Number: 00020111016

**Liaison Advisory Committee on Transfer Students (LACTS) Articulation Meeting Report Form**

**Disciplines/Programs:** *Biology*

**Courses Discussed:** *Anatomy and Physiology I and II*

**Date Meeting Held:** *February 11, 2011*

**Location:** *DMACC-Newton*

**Regent Facilitator(s) with contact information**

**Name:** David Saunders

**Institution, Department, position:** *University of Northern Iowa, Department of Biology, Chair*

**Telephone:** *319-273-2456*

**Email:** *david.saunders@uni.edu*

**Community College Facilitator(s) with contact information:**

**Name:** *Bob Driggs*

**Institution, Department, position:** *Kirkwood Community College, Math and Science, Dean*

**Telephone:** *319-398-5516*

**Email:** *bob.driggs@kirkwood.edu*

**List at least one outcome for each agenda item: (attach additional pages as necessary)**

Discussion centered on course content for the Anatomy and Physiology I and II courses. Participants generally agreed on the importance of advising students to take both courses at the same college. The order of course content topics will vary from college to college so the combination of the two semesters is important for transferability for any student needing to study beyond the first level.

The initial meeting to launch the development of a biology transition guide was held. This guide is intended to assist the Iowa public colleges and universities with defining the biology curriculum with students benefiting from smoother transitions between institutions. The planning group received excellent feedback from the gathered faculty. Their goal is to have the biology transition guide completed in 6-8 months.

**List future meeting plans, dates:** *Meetings (telephonic, electronic and face to face) were held throughout spring and summer 2011 to develop the transition guide.*

**Describe your group's needs, if any, for support by LACTS:** *Not noted.*

**AGENDA: BIOLOGY PORTION OF THE ARTICULATION CONFERENCE, FEBRUARY 11, 2011**

8:30-9:00	Check in & Continental Breakfast
9:00-9:30	Welcome -- Overview of HF 815
9:30-11:25	First Biology Breakout Session
11:30-12:30	Lunch
12:35-1:55	Second Biology Breakout Session
2:00-2:15	Evaluation & Wrap-up
2:15-3:15	Overview of Transition Guide
3:15-3:30	Questions & Answers (for everyone attending the conference)

**Attendees:** *This faculty to faculty meeting was held in conjunction with two other discipline areas. A separate breakdown by discipline area is not available. Thus, the following is a combined attendee list.*

**Attendees of the February 11, 2011 biology, English and speech articulation conference include the following institutions:**

<u>Institution</u>	<u>Number of Attendees</u>
The University of Iowa	11
Iowa State University	11
University of Northern Iowa	9
DMACC	7
Kirkwood CC	18
Southeastern CC	7
Iowa Western CC	9
Indian Hills CC	14
Western Iowa Tech CC	4
Hawkeye CC	6
Southwest Iowa CC	5
Northeast Iowa CC	11
Eastern Iowa CC District	3
Iowa Valley CC District	6
Iowa Central CC	6
Iowa Lakes CC	2
Northwest Iowa CC	1

Contact information as reporter:

Name: Christie Kangas

Institution, Department, position: University of Northern Iowa, Director of Admissions

Telephone: 319-273-2281

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**Liaison Advisory Committee on Transfer Students (LACTS) Articulation Meeting Report Form**

**Disciplines/Programs:** *Biology*

**Courses Discussed:** *General Biology I and II*

**Date Meeting Held:** *February 11, 2011*

**Location:** *DMACC-Newton*

**Regent Facilitator(s) with contact information**

**Name:** David Saunders

**Institution, Department, position:** *University of Northern Iowa, Department of Biology, Chair*

**Telephone:** *319-273-2456*

**Email:** *david.saunders@uni.edu*

**Community College Facilitator(s) with contact information:**

**Name:** *Bob Driggs*

**Institution, Department, position:** *Kirkwood Community College, Math and Science, Dean*

**Telephone:** *319-398-5516*

**Email:** *bob.driggs@kirkwood.edu*

**List at least one outcome for each agenda item:**

Discussion centered on course content for the General Biology I and II courses. Participants generally agreed on the importance of advising students to take both courses at the same college. The order of course content topics will vary from college to college so the combination of the two semesters is important for transferability for any student needing to study beyond the first level.

The initial meeting to launch the development of a biology transition guide was held. This guide is intended to assist the Iowa public colleges and universities with defining the biology curriculum with students benefiting from smoother transitions between institutions. The planning group received excellent feedback from the gathered faculty. Their goal is to have the biology transition guide completed in 6-8 months.

**List future meeting plans, dates:** *Meetings (telephonic, electronic and face to face) were held throughout spring and summer 2011 to develop the transition guide.*

**Describe your group's needs, if any, for support by LACTS:** *Not noted.*

**AGENDA: BIOLOGY PORTION OF THE ARTICULATION CONFERENCE, FEBRUARY 11, 2011**

8:30-9:00	Check in & Continental Breakfast
9:00-9:30	Welcome -- Overview of HF 815
9:30-11:25	First Biology Breakout Session
11:30-12:30	Lunch
12:35-1:55	Second Biology Breakout Session
2:00-2:15	Evaluation & Wrap-up
2:15-3:15	Overview of Transition Guide
3:15-3:30	Questions & Answers (for everyone attending the conference)

**Attendees:** *This faculty to faculty meeting was held in conjunction with two other discipline areas. A separate breakdown by discipline area is not available. Thus, the following is a combined attendee list.*

**Attendees of the February 11, 2011 biology, English and speech articulation conference include the following institutions:**

<u>Institution</u>	<u>Number of Attendees</u>
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Contact information as reporter:

Name: Christie Kangas

Institution, Department, position: University of Northern Iowa, Director of Admissions

Telephone: 319-273-2281

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**Liaison Advisory Committee on Transfer Students (LACTS) Articulation Meeting Report Form**

**Disciplines/Programs:** *English*

**Courses Discussed:** *Required college writing course (name varies by institution)*

**Date Meeting Held:** *February 11, 2011*

**Location:** *DMACC-Newton*

**Regent Facilitator(s) with contact information**

**Name:** Jeff Copeland

**Institution, Department, position:** *University of Northern Iowa, Department of Languages and Literature, Chair*

**Telephone:** *319-273-2855*

**Email:** *Jeffrey.copeland@uni.edu*

**Community College Facilitator(s) with contact information:**

**Name:** *Shelby Myers-Verhage*

**Institution, Department, position:** *Kirkwood Community College, English, Faculty*

**Telephone:** *319-887-3635*

**Email:** *shelby.myers-verhage@kirkwood.edu*

**Other planning committee members:**

Chad Menke, Southeastern Iowa Community College

Patt Kelly, Iowa Western Community College

Joe Davis, North Iowa Area Community College

Rhonda Eakins, Indian Hills Community College

Devonee McDonald, Kirkwood Community College

Barbara Ching, Iowa State University

Claire Sponsler, University of Iowa

**List at least one outcome for each agenda item: (attach additional pages as necessary)**

From Jeff Copeland, Regent Facilitator:

First, I'd like to say up front that I felt this conference was the **\*best\*** event of this type I have ever attended in my going-on-seventeen years of serving as an academic administrator. I honestly did not know what to expect out of the conference, so I worked with individuals from Iowa's community colleges **\*before\*** the conference to set up a very specific agenda for the day. That turned out to be a good decision because it allowed everyone to prepare for the conversations and information-sharing sessions.

The first thing I discovered at the conference was this: To a person (and we had about sixty in the English session), not a single one of us had ever in the past attended a session where members of the community colleges and Regents schools got together to share information. I was so sad when I found out this information. Both groups are partners in the education of the citizens of Iowa, and it is unthinkable that such a lack of communication has existed for so long. Therefore, one of our first recommendations, as a group, was that we continue to have at least "yearly" meetings, held on different campuses each time, to continue these valuable discussions.

I think I was most pleased during the sessions by how open and willing all participants were to share information about their schools -- and especially their goals, objectives, and missions of their English programs. As a matter of fact, we began one major session by creating posters listing this information for

all schools represented in the room. Then, representatives from each school shared this information with everyone in the auditorium. This was, needless to say, a real eye-opener. We discovered we do, in fact, have many common goals and objectives. However, at the same time, we discovered there were also a great many areas where we were different in the scope of what we are trying to do -- and that many of these differences were a direct result, in so many cases, of one hand not knowing what the other hand was doing! In other words, if we had been keeping better communication through the years among the various schools, many of the existing challenges could have been averted.

I was also mightily surprised by another fact that surfaced almost immediately: It wasn't just that those in the Regents schools didn't know much about what was taking at the community college level. The real surprise was that we didn't know what was going on from Regent school to Regent school -- and from community college to community college. Thus, the communication problem isn't just between the Regents schools and community colleges. It became apparent **\*nobody\*** knew what the others were doing! Again, we vowed to take care of this in future years.

After lunch the session was devoted to what we all saw as "challenges" ahead. In this session, which was lively and spirited, we came up with the following:

- 1). We believed, more than anything, that conferences like this bringing Regent schools and community colleges together should happen much, much more frequently -- and that we firmly believe this **MUST** happen. We recommend similar sessions for every year.
- 2). Both those representing Regent schools and community colleges agreed that the area of "dual enrollment" (high school students taking community college classes or, in limited cases, high school students taking classes from Regent schools) is a major concern for all of us. This is an area with incredible implications for both groups, and we all agreed we'd appreciate opportunity to meet regularly to discuss this area -- especially since we are ALL handling this differently.
- 3). We believe the future meetings of this type should be "rotated" around the state so that we can eventually meet at all schools represented. So many in our sessions had never been on the campus of more than just a handful of schools around the state. We felt it would be good to see the facilities and visit specifically with those at the various schools.
- 4). We also came out of our sessions believing that the old views of "Us VS Them" when discussing the relationship between the Regent schools and the community colleges died many, many years ago. All now see ourselves as parts of the same team, and we'd like the opportunity to make this team as strong as we possibly can. Some of this will, no doubt, happen if we can meet more regularly. Therefore, it is our firm wish that we be helped with arranging more regular meetings of this type in the future - -and that our meetings be sanctioned by LACTS.
- 5). Finally, we all discovered our "writing requirement" for our various degrees were put into place partly because of beliefs we had about what was going on at other institutions (requirements there). We discovered that our current information in this area is woefully out of date. Therefore, we agreed that all of our writing requirements could benefit from review of the associated goals and objectives -- and these reviews could be made more positive if we communicate better between and among ourselves about what and why we are requiring these. In short, we decided a special day(s) for all of us to get together to talk specifically about our writing requirements at our schools would be a very wise thing to do - -and we hope it can be done sooner than later.

In closing, I'd say this articulation conference was incredibly productive, not just because of what we accomplished during the day, but for the possibilities it presented for the future for all represented. Therefore, we respectfully request that these conferences be held much more regularly.

**List future meeting plans, dates:** *Annual, rotating location to the various campuses*

**Describe your group's needs, if any, for support by LACTS:** *Support for organizing annual meetings*

**AGENDA:** ENGLISH PORTION OF THE ARTICULATION CONFERENCE, FEBRUARY 11, 2011

8:30-9:00 Check in & Continental Breakfast

9:00-9:30 Welcome -- Overview of HF 815 (Christie Kangas, UNI)

9:30-10:25 First English Breakout Session: Topic: Sharing Goals and Objectives of our writing courses -- and how we see the "place and purpose" of our writing courses in our various degree programs. We'll also share the types of assignments (written and otherwise) we have our students do in the classes. Session Discussion Leader: Shelby Myers-Verhage, Kirkwood CC

10:35-11:25 Second English Breakout Session: Topic: It is time to revisit Course equivalencies (equivalences) between CCs and Regent schools. The perception held by many is that the CCs, historically, have required 6 hrs. of writing for the overall AA degree requirement. Another perception is that Regent schools require 3 hrs. of writing instruction for the Liberal Arts Core (or equivalent thereof) requirement. Therefore, the perception held by many is that requiring 6 hrs. at the CC level but requiring only 3 hrs. at the Regent level does not do justice to "equivalency."

The fact of the matter is that the true writing requirement at the Regent schools is something that isn't shared very often (even among the Regent schools themselves); this will be discussed in this session. The fact of the matter is that the true writing requirement at the CCs is very misunderstood (even among the different CCs); this will be discussed in this session. The fact of the matter is that the whole area of "equivalency" has not been discussed by this group (representatives from CCs and Regent schools) in over twenty years; this discussion will be started on the 11th -- and we'll keep the discussion going in our future meetings as well. Session Discussion Leader: Rhonda Eakins, Indian Hills CC

11:30-12:30 -- Lunch

12:35-1:25 Third English Breakout Session: Topic: Dual-Enrollment -- how to work together to make this area the greatest "positive" for all concerned (students and institutions).

This is, apparently, one of the "hot-button" topics for those at both the CCs and the Regent schools.

Quick editorial note: The latest numbers at UNI indicate that roughly 65% of our students bring at least some academic credit, in various subject areas, to UNI from other schools (other Regent schools, CCs, private schools, and dual-enrollment credit from high schools/CCs). It has been two years since we last looked at this specifically in the area of the writing requirement, but our last study showed that one-fourth of our students met the UNI writing requirement before attending UNI. In looking at these numbers, we discovered the fastest growing sub-set of these students were those who were earning credit while still in high school through dual-enrollment involving the CCs.

To get this discussion session started, I'll offer this prediction (which may or may not be correct): The numbers related to dual-enrollment will only continue to increase in future years. Therefore, how can the CCs and the Regent schools work together most effectively in this area to achieve the greatest "positive" for all concerned (students and institutions)? At the same time, what are the observations/opinions of the group related to this area? We'll share all thoughts about this during this session. Session Discussion Leader: Joe Davis, NIACC

1:30-1:55 -- Fourth English Breakout Session: We'll take this twenty-five minutes to set up topics and plans for future meetings -- and to visit with each other more informally.

2:00-2:15 -- Evaluation & Wrap-up.

2:15-3:15 -- Overview of Transition Guide (Primarily for Biology Faculty -- so those of us in English may have the option of continuing our discussions instead of attending this session).

3:15-3:30 -- Questions & Answers (for everyone attending the conference -- not just our group).

**Attendees:** *This faculty to faculty meeting was held in conjunction with two other discipline areas. A separate breakdown by discipline area is not available. Thus, the following is a combined attendee list.*

**Attendees of the February 11, 2011 biology, English and speech articulation conference include the following institutions:**

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Contact information as reporter:

Name: Christie Kangas

Institution, Department, position: University of Northern Iowa, Director of Admissions

Telephone: 319-273-2281

Email: Christie.kangas@uni.edu

**Liaison Advisory Committee on Transfer Students (LACTS) Articulation Meeting Report Form**

**Disciplines/Programs:** *Biology*

**Courses Discussed:** *Microbiology*

**Date Meeting Held:** *February 11, 2011*

**Location:** *DMACC-Newton*

**Regent Facilitator(s) with contact information**

**Name:** David Saunders

**Institution, Department, position:** *University of Northern Iowa, Department of Biology, Chair*

**Telephone:** *319-273-2456*

**Email:** *david.saunders@uni.edu*

**Community College Facilitator(s) with contact information:**

**Name:** *Bob Driggs*

**Institution, Department, position:** *Kirkwood Community College, Math and Science, Dean*

**Telephone:** *319-398-5516*

**Email:** *bob.driggs@kirkwood.edu*

**List at least one outcome for each agenda item:**

Discussion centered on course content for the Microbiology courses. Participant discussed the purposes for their courses, what majors used the courses, whether the courses served as prerequisites for further study to increase their understanding of each educational environment.

The initial meeting to launch the development of a biology transition guide was held. This guide is intended to assist the Iowa public colleges and universities with defining the biology curriculum. Students will benefit from smoother transitions between institutions. The planning group received excellent feedback from the gathered faculty. Their goal is to have the biology transition guide completed in 6-8 months.

**List future meeting plans, dates:** *Meetings (telephonic, electronic and face to face) were held throughout spring and summer 2011 to develop the transition guide.*

**Describe your group's needs, if any, for support by LACTS:** *Not noted.*

**AGENDA: BIOLOGY PORTION OF THE ARTICULATION CONFERENCE, FEBRUARY 11, 2011**

8:30-9:00	Check in & Continental Breakfast
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**Attendees:** *This faculty to faculty meeting was held in conjunction with two other discipline areas. A separate breakdown by discipline area is not available. Thus, the following is a combined attendee list.*

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Contact information as reporter:

Name: Christie Kangas

Institution, Department, position: University of Northern Iowa, Director of Admissions

Telephone: 319-273-2281

Email: Christie.kangas@uni.edu

**Liaison Advisory Committee on Transfer Students (LACTS) Articulation Meeting Report Form**

**Disciplines/Programs:** *Speech*

**Courses Discussed:** *Required speech course (name varies by institution)*

**Date Meeting Held:** *February 11, 2011*

**Location:** *DMACC-Newton*

**Regent Facilitator(s) with contact information**

**Name:** *April Chatham-Carpenter*

**Institution, Department, position:** *University of Northern Iowa, Department of Communication Studies, Professor*

**Telephone:** *319-273-5901*

**Email:** *april.chatham-carpenter@uni.edu*

**List at least one outcome for each agenda item:**

From April Chatham-Carpenter, Regent Facilitator:

**CONTENT OF COURSES**

DMACC -- Public Speaking, Interpersonal/Small Group courses

Hawkeye CC -- Fundamentals of Oral Communication – 4 individual speeches + 1 group presentation; have a stage-fright section, fast-track, partly online

Indian Hills CC -- Public Speaking – 5 speeches; Fundamentals of Oral Communication course – 2 speeches – also have online format for this course

Iowa Central CC -- Fundamentals of Oral Communication – do teach online & fast-track versions

Iowa Lakes CC -- Oral Communication – “hybrid” means f-t-f + online; also have completely online courses, fast-track version also; Interpersonal Communication; Public Speaking

Iowa State University -- Public Speaking – 2 lectures with breakouts, 6 speeches – 3 informal & 3 formal

Iowa Valley CC -- Public Speaking – 4 main speeches as a minimum

Iowa Western CC -- Public Speaking – minimum of 4 formal speeches; Interpersonal – many students take this option, but unclear whether it will transfer

Kirkwood CC -- Public Speaking – 4-7 speeches; Fundamentals of Oral Communication hybrid – communication theory, group, interpersonal, public speaking, some do interviewing techniques, 3-5 speeches + hybrid online component for some, with some totally online – do have to present speech to a group, however; have a lot of communication courses such as Group, Cultural, etc.; some others have taught out of Business Dept.; persuasion is not included currently

Muscatine CC – Eastern Iowa CC District -- Public Speaking; Professional Communication; Interpersonal used to a part, but not enough “minutes spoken” to count – needs a 30-minute minimum speech requirement; do some online

Northeast Iowa CC, Calmar -- Public Speaking – inc. a technical speech; have offered online courses, students have flip videos, are required to have an adult audience, & the final speech is presented to a public organization; have offered a 7 X 7 – 7 day, 7 hour; have an evening hybrid – 50% f-t-f and 50% online

Northeast Iowa CC, Peosta -- Public Speaking; Workplace Communication; Organizational Communication – some online versions

Southeastern CC -- Public Speaking primarily

Southwestern CC -- Fundamentals of Oral Communication; Public Speaking

Univ. of Iowa -- Rhetoric Sequence: Writing, Reading & Speaking – focused on controversies; Speaking Center; do have a guided independent study version of the course; now have a 4 hour course that encompasses writing/reading/speaking

UNI -- Oral Communication hybrid for all first-year students – 4 presentations; option of a 2-course sequence in place of Oral Communication (Public Speaking, Oral Interpretation, OR Argumentation & Debate; AND Interpersonal Communication OR Group Communication); First-Year Cornerstone course option, which combines 6 hour, 2 semester sequence incorporating both Writing/Speaking into a two semester first-year experience academically-focused course

Western Iowa Tech -- Public Speaking

**CONCERNS WITH ONLINE COURSES – How to Deal with Concerns**

- More practice (taping) of speeches
- More realistic speaking settings, in some cases
- Even without an audience, we are teaching them to use technology to present a message (e.g., mediated communication)
- Evaluate the other speakers (e.g., private YouTube area)
- Not everyone can take the course – in some cases, have to take an online quiz to take it
- More individual attention on writing

**CONCERNS WITH FAST-TRACK COURSES – How to Deal with Concerns**

- No watering down of content – immersion
- More time for things
- Still have research & critical thinking requirements
- Good for high speaking anxiety students

**DUAL CREDIT**

- What transfers & what doesn't?
- Department of Education (DoE) Concurrent Enrollment report – part of a larger Community College DoE report
- Difference between teaching in the high school and on the college campus
  - o Teaching in the high school – different time slots
- How to integrate high school students with college students in class
  - o Seating charts (not sitting next to best friend)
  - o Groups across the class
  - o They are often well-prepared – but faculty do need to be aware of the context in which they are teaching.
- Different standards across institutions & across the country
- High school teachers teaching this class (NASAP standards require monitoring at the high school)
  - o Treat them like they are adjuncts, as if they are faculty – have to be “hired”, train them (in-service), use same textbook
  - o Adjunct orientation for the high school teachers especially
  - o Not evaluating the faculty, but the course syllabi
  - o Meet them once a year
  - o Have to have the same cap on class sizes as on-campus Community College classes
  - o High school relations coordinator ensures cap, etc.
  - o Assess across types of classes & keep track of high school class scores & pull low-performing ones
  - o Course evaluations
- Faculty have to take time to do this monitoring. How can they be awarded for this?

- Do all sections have to be monitored?
- Students, to take these classes, have to have a certain GPA, etc., in order to take the course. They have to make an A or B to not have to pay for the course.
- Emphasize to the student it generates a permanent transcript for college.
- Content has to be altered sometimes (e.g., examples used to illustrate concepts) – some do alter it and others don't. We shouldn't have to, however, some think.
- Cost – high schools have sometimes gone to having the students buy the text, but with senior-plus legislation high schools have to carry the brunt of the cost, so it possibly could be cost-prohibitive to do this for more than a couple of classes.
- Looking at the whole student – are they getting what they need by us offering this? NCTE publication: "Getting College Credit for Writing in High School: Getting it Taken Care of" [Karla Brown – what is exact title?]
- Dual credit vs. CLEP test – isn't this similar?

**QUESTIONS – To continue discussion in the future**

- Online challenges & how to do it
- How to tell students which class to take – where are some of these courses located (are they required, are they electives, etc.)
- Which class should "count"? Who determines this?
- Do Fast-track courses work?
- How many speeches? Length of speeches? - what transfers to UNI, Iowa, Iowa State
  - o Group speeches
  - o Informative
  - o Persuasive
  - o Intercultural component
- How to get students to take Interpersonal Communication if it isn't required at state regents' schools?
- What to do with high anxiety students?
- How to increase civic dialogue?
- How do you cover everything – either so many speeches, or all the content in a hybrid course?
- The changing conception of an "audience" for speaking – is online speaking really public speaking?
- Writing & speaking outcomes in one course

**List future meeting plans, dates:** Iowa Communication Association – third weekend in September at DMACC, Ankeny

**Describe your group's needs, if any, for support by LACTS:** When does speech come back up to have this articulation discussion again?

**AGENDA:** ENGLISH PORTION OF THE ARTICULATION CONFERENCE, FEBRUARY 11, 2011

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- 2:15-3:15 Overview of Transition Guide (Primarily for Biology Faculty – Speech faculty have the option of continuing discussions instead of attending this session)
- 3:15-3:30 Questions & Answers (for everyone attending the conference)

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Contact information as reporter:

Name: Christie Kangas

Institution, Department, position: University of Northern Iowa, Director of Admissions

Telephone: 319-273-2281

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**Liaison Advisory Committee on Transfer Students (LACTS) Articulation Meeting Report Form**

**Event:** Agriculture Articulation Summit, titled *Preparing Science and Technology Talent for Iowa's Agriculture Industries*,

**Disciplines/Programs:** Agriculture Business, Agronomy, Horticulture, Animal Science

**Courses Discussed:**

**Agronomy**

Agron 114 Principles of Agronomy  
Agron 154 Fundamentals of Soil Science  
Agron 283 Pesticide Application Certification

**Horticulture**

Hort 221 Principles of Horticulture  
Hort 240 Trees, Shrubs, and Woody Vines for Landscape  
Hort 351 Turfgrass Establishment and Management

**Agriculture Business**

Econ 230 Farm Business Management  
Econ 235 Introduction to Agricultural Markets  
Econ 101 Principles of Microeconomics  
Econ 102 Principles of Macroeconomics

**Animal Science**

An S 114 Survey of Animal Industry  
An S 214 Animal Anatomy and Physiology

**Date Meeting Held:** June 28, 2011

**Location:** Iowa FFA Enrichment Center, Ankeny, Iowa

**Regent Facilitator(s) with contact information**

Name: Dr. David Acker  
Institution, Department, position: Iowa State University, College of Agriculture & Life Sciences, Associate Dean  
Telephone: 515.294.6614  
Email: [dacker@iastate.edu](mailto:dacker@iastate.edu)

**Community College Facilitator(s) with contact information:**

Name: Scott Ermer  
Institution, Department, position: Kirkwood Community College, Agriculture Sciences, Dean  
Telephone: 319.398.4944  
Email: [scott.ermer@kirkwood.edu](mailto:scott.ermer@kirkwood.edu)

**List at least one outcome for each agenda item: (attach additional pages as necessary)**

The inaugural Summit, titled *Preparing Science and Technology Talent for Iowa's Agriculture Industries*, was held on June 28, 2011 and had the following goals and outcomes:

**Outcomes:**

1. Introductory Course Outlines were reviewed within the program groups.
2. Progress made towards standardizing common course descriptions among institutions.
3. Transfer issues were discussed within program groups.
4. Program faculty were able to discuss curriculum content, industry needs and best practices.
5. Agreement reached on the importance of continuing work sessions on annual basis between Community College and University Faculty.  
*Reports from each program group available upon request.*

**Goals for coming year:**

1. Continue collaborations between Iowa's community colleges and Iowa State University to improve articulation and transition processes for agriculture students who begin their education at a community college and continue at Iowa State University.
2. Continue to share among faculty lessons learned related to curriculum.
3. Update knowledge about the latest trends in agriculture and related sciences.
4. Strengthen linkages between instructional programs and Iowa's agriculture industries to insure the instructional programs are preparing the workforce needed to maintain Iowa's global competitiveness.
5. As discussions and articulation work is not limited to the annual summit, continue faculty to faculty discussions throughout the academic year to improve articulation in the four disciplines discussed at the June 2011 conference (Agronomy, Ag Business, Horticulture and Animal Science).
6. Work towards greater articulation of 200-level Animal Sciences courses during the 2011-2012 year.
7. Plan and conduct the second annual summit on June 26, 2012.

**List future meeting plans, dates:** June 26, 2012

**Describe your group's needs, if any, for support by LACTS:**

**Please scan in and send as attachments to email:**

- 1) a copy of your meeting agenda;
- 2) a copy of scanned in attendees list with email and institution printed;
- 3) this results report
- 4) your contact information as reporter:

Name: Scott Ermer

Institution, Department, position: Kirkwood Community College

Telephone: 319.398.4944      Email: [scott.ermer@kirkwood.edu](mailto:scott.ermer@kirkwood.edu)

**Liaison Advisory Committee on Transfer Students (LACTS) Articulation Meeting Report Form**

**Disciplines/Programs:** Criminology

**Courses Discussed:** Introduction to criminology, criminal justice systems

**Date Meeting Held:** Sept. 14, 2011

**Location:** University of Northern Iowa, Maucker Union

**Regent Facilitator(s) with contact information**

**Name:** Richard Featherstone

**Institution, Department, position:** University of Northern Iowa, Department of Sociology, Anthropology, and Criminology, Interim Department Head

**Telephone:** 319 273-2786

**Email:** richard.featherstone@uni.edu

**Name:** Matt DeLisi

**Institution, Department, position:** Iowa State University, Department of Sociology, Professor

**Telephone:** 515-294-8008

**Email:** delisi@iastate.edu

**Name:** Karen Heimer

**Institution, Department, position:** University of Iowa, Department of Sociology, Professor

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**List at least one outcome for each agenda item: (attach additional pages as necessary)**

1. Discussion of the state of criminal justice in Iowa. Thomas H. Miller, Iowa Deputy Attorney General, presented a brief overview of how criminal justice has changed over time in Iowa and what the needs are for criminal justice professionals today.
2. Each of the Regent Universities was able to provide a description of their criminology programs.
3. Representatives from Iowa community colleges were able to discuss what they believed were challenges facing criminology students and faculty at the freshman and sophomore levels.
4. Criminology faculty and advisors were able to spend time talking with each other in small groups and discussing how they could improve their programs and form better articulation agreements.
5. A panel of criminal justice administrators explained how academic institutions could do a better job of preparing students for the workplace.

**List future meeting plans, dates:**

We are considering a follow-up meeting in two years at a location more centrally located, perhaps at Des Moines Area Community College

**Describe your group's needs, if any, for support by LACTS:**

Unsure at this time.

**Please scan in and send as attachments to email:**

- 1) a copy of your meeting agenda;
- 2) a copy of scanned in attendees list with email and institution printed;
- 3) this results report
- 4) your contact information as reporter:

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**Send to any Regent or Community College LACTS Representative (see below for contact information) as appropriate within two weeks of your meeting. Thanks for your support in improving articulation for the students of the State of Iowa!**

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