Present: Carroll, Charney, Hubler, King, LeHew, Montelone, Pacey, Ramaswamy, Staggenborg, Weninger
Absent: Chengappa, Holcombe, Martin
Visitors: Nielsen

1. Doris Carroll, Chair, called the meeting to order at 3:30 p.m.

2. The September 18, 2007 minutes were approved as submitted.

3. Announcements

4. Course and Curriculum Changes
   A. Undergraduate Education
      1. A motion was made by Hubler and seconded by King to approve the following course and curriculum changes as approved by the College of Arts & Sciences on October 4, 2007:

      **COURSE CHANGES**
      
      *Dean of Arts & Sciences*
      Change:
      DAS 178 Listening Skills Oral Communication for Non-native Speakers of English
      DAS 156 Introduction to American Academic Research Writing for International Students
      DAS 157 Introduction to American Academic Presentations for International Students
      DAS 158 Orientation to American Culture and Education

      Add:
      DAS 030 English Language Program Orientation

      *Department of History*
      Add:
      HIST 501 Japan’s Samurai Age

      *School of Journalism and Mass Communications*
      Add:
      MC 576 Mass Communications and Political Campaigns

      *Department of Political Science*
      Change:
      POLSC 576 508 The Mass Media Mass Communications and Political Campaigns in alternate years (change in title and description)

      *Department of Psychology*
      Add:
      PSYCH 565 Occupational Healthy Psychology

      *Department of Sociology, Anthropology and Social Work*
      Change:
      SOCIO 507 Comparative Political Sociology International Development and Social Change
      SOCWK 330 Introduction to Social Work Research (Change to prerequisites)
      SOCWK 510 Social Welfare as a Social Institution
      SOCWK 315 515 Human Behavior in the Social Environment I
SOCWK 525 Human Behavior and the Social Environment II (Prerequisite change)
SOCWK 550 Field Practicum Preparation (Course description changes)
SOCWK 560 Social Work Practice I (Course description and prerequisite changes)
SOCWK 562 Field Experience (Prerequisite changes)
SOCWK 565 Social Policy Program and Policy Formulation and Analysis
SOCWK 570 Social Work with Groups (Course description change)

Add:
ANTH 360 Topics for Educators
SOCWK 200 Basic Skills for Working with People
SOCWK 312 Fundamentals of Communication for the Agriculture and Food Science Community
SOCWK 320 Dynamics of Working with Older Adults

Drop:
SOCWK 010 Introduction to the Social Work Major
SOCWK 543 Women’s Mental Health Issues
SOCWK 566 Social Work in Aging Services
SOCWK 580 Women’s Perspective on Peace and War

CURRICULUM CHANGES
(Attachment 1)

Pacey noted a minor clarification on curriculum changes. It was noted it should be the “Division” of Biology not the department of Biology. Correction was accepted.

Motion carried.

B. Graduate Education –

1. A motion was made by Ramaswamy and seconded by King to approve the following course and curriculum changes approved by the Graduate Council on October 2, 2007:

   **New Certificate Program**
   Interdisciplinary Graduate Certificate in Stem Cell Biotechnology (Attachment 2)

   Hubler had questions regarding the student learning outcomes and how they are to be met. There was concern about course ASI 902 Topics in Stem Cell Biotechnology. Clarification was requested regarding the content of this topics course as well as other items in this proposal. Further discussion regarding other items within the proposal ensued.

   The motion was withdrawn. A motion was made by Hubler and seconded by Montelone to table this proposal. Motion carried. Carroll will take concerns about this proposal back to the creators. Where will students get the knowledge of ethics? Could page 12 be used to describe how the student would be exposed to the information? If these concerns can be answered within the existing information, the committee would feel much more comfortable approving this.

2. A motion was made by Montelone and seconded by LeHew to bring these curriculum items back to the floor for approval the following course changes approved by the Graduate Council on September 4, 2007:

   **Changes (Human Ecology May 2, 2007 white sheets)**
   HN 701 Sensory Analysis

   **New**
The clarification that was needed has been addressed. Motion to approved carried.

C. General Education - none

D. Graduation additions
   1. A motion was made by LeHew and seconded by Montelone to approve the August 2007 Graduation list as submitted by the Registrar’s Office. Motion carried.

   2. A motion was made by Weninger and seconded by Ramaswamy to approve the following graduation list additions:

      **August 2007**
      Eddie Vasquez, Bachelor of Science – College of Arts & Sciences
      Amelia Acevedo Nail – Bachelor of Arts – College of Arts & Sciences

      **May 2007**
      Lacie Marie Leatherman, Bachelor of Science in Business Administration – College of Business Administration

      **December 2006**
      Keith Anderson Oxler, Bachelor of Arts – College of Arts & Sciences
      Quadriyyah Khadijah Musawwir, Bachelor of Science in Family Studies and Human Services – College of Human Ecology

      Motion carried.

5. Committee Reports
   A. University Library Committee – Mohan Ramaswamy
      The ULC met last Wednesday. It was an informational meeting as there are many new members. Electronic journals were discussed in detail. A member from the General Education Task Force visited to give the ULC information regarding changes coming up. Clarence Bauman, Director of Development at the Library, also came in and discussed how the Library does its fund-raising.
   B. Committee on Academic Policy and Procedures (CAPP) – Doris Carroll
      Carroll will defer until old business.
   C. Student Senate – Tim Weninger
      A vote for the referendum on the recreation center expansion is coming up. Weninger reminded members to submit text book orders.
   D. Course and Curriculum ad hoc committee - Candace Becker
      The proposal has been submitted to Academic Affairs and will be reviewed next month. Nielsen commented on the demonstration that was given on October 2 on the new student software system. The timeline that was mentioned is encouraged, but is not a hard and fast, but it is what is recommended and what will be hoped for.
   E. General Education Task Force – Melody LeHew
      There has been much discussion about how any fears can be calmed throughout the university community. It is hoped the Provost website will offer information regarding recommendations that were offered by the general education task force. LeHew is on the assessment subcommittee of the task force. The committee is working
very diligently to get a timeline done. Carroll will request that Frank Spikes put this back on the agenda to talk to the Provost.

6. Old Business
   A. Final Exam Policy (CAPP)
      Caroll handed out a revised proposal to committee members from CAPP for a first reading. This will be reviewed again at the next meeting. Karen Pence or another representative from CAPP will be present to answer questions.
   B. Plagiarism Definition (CAPP)
      CAPP will confer with the Honor Council. They will also have a university attorney review the language. Once this has been done, the definition will come back to us again. Charney shared the information that he found on the Honor & Integrity System website.

7. New Business
   A. Policy on failing grades in credit/no credit courses – Carroll
      An issue came to Carroll from Ruth Dyer after a student had complained when receiving an F for a no credit course. Copies of the January 14, 1997 FS minutes were passed out. The committee discussed this specific incident and Carroll will take their feedback to Dyer.

   B. Honor code violation – Weninger asked about the current policy regarding report honor code violations. Right now it is voluntary to report a violation to the Honor & Integrity system. However, the professor can impose sanctions and not report this to the Honor & Integrity. It was commented that a student can file a grievance if he has a complaint about a sanction that is imposed. Weninger thanked the committee for the information and will take it back to student senate.

8. For the good of the University
   Ramaswamy commented on the Bell Clapper that used to be in Anderson Hall. It was stolen in 1905 and returned in 1995. It is now on display in Hale Library on the second floor.

   On October 19th at 1, 2, & 4 p.m. tours of the University Archives will be given. At 3:00 p.m. in the Hemisphere, Tony Crawford will be giving an informational seminar on the archives.

   A celebration of the new Honors Program will be on Thursday from 3-5 p.m. in Leasure Hall. Please attend if you have the opportunity.

9. The meeting was adjourned at 5:07 p.m.

Submitted by:
Candace Becker
Faculty Senate Office
Attachment 1
Arts & Sciences Undergraduate Curriculum Changes – As approved by the College of Arts & Sciences on October 4, 2007

Division of Biology
(pg 105 of undergraduate catalog)

CHANGE:

Microbiology degree

Students in microbiology may obtain either the BA or BS degree. The requirements for a microbiology major, in addition to those requirements of the College of Arts and Sciences, include blocks A, B, and C as listed below.

Block A: Courses offered by other departments

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Analytical Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 230</td>
<td>Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 350</td>
<td>General Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHM 351</td>
<td>General Organic Chemistry Lab</td>
<td>2</td>
</tr>
<tr>
<td>BIOCHE 523</td>
<td>General Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 113</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 114</td>
<td>General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Prerequisites for MATH 220 are MATH 100 and 150 or four semesters of high school algebra and one semester of trigonometry, plus appropriate math placement exam scores. Upon consultation with a Division of Biology advisor, a student may substitute: Biochemistry I and II for General Biochemistry; Organic Chemistry I and II for General Organic Chemistry; Organic Chemistry I Lab for General Organic Chemistry Lab; and Engineering Physics I and II for General Physics I and II.

Block B: Division of Biology courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 198</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 450</td>
<td>Modern Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 455</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 670</td>
<td>Immunology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 675</td>
<td>Genetics of Microorganisms</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 680</td>
<td>Microbial Physiology and Metabolism</td>
<td>3</td>
</tr>
</tbody>
</table>

Block C: Microbiology major electives

Students must take an additional 14 hours from courses listed below. At least half the 14 hours total must be laboratory courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BIOL 397</td>
<td>Topics in Biology</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Biology of the Cancer Cell</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 530</td>
<td>Pathogenic Microbiology (lab)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 531</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 545</td>
<td>Human Parasitology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 546</td>
<td>Human Parasitology Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 604</td>
<td>Biology of Fungi (lab)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 625</td>
<td>Animal Parasitology (lab)</td>
<td>4</td>
</tr>
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<td>BIOL 671</td>
<td>Immunology Lab</td>
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<td>BIOL 676</td>
<td>Molecular Genetics Lab</td>
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<td>BIOL 687</td>
<td>Microbial Ecology</td>
<td>3</td>
</tr>
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<td>BIOL 698</td>
<td>Problems in Biology (lab)</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 705</td>
<td>Eukaryotic Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 707</td>
<td>Advanced Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 720</td>
<td>Anaerobic Bacteriology</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 730</td>
<td>General Virology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 731</td>
<td>Virology Lab</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 735</td>
<td>Specialized Cell Functions</td>
<td>2</td>
</tr>
<tr>
<td>ASI 607</td>
<td>Food Microbiology (lab)</td>
<td>4</td>
</tr>
<tr>
<td>AGRON 645</td>
<td>Soil Microbiology (lab)</td>
<td>4</td>
</tr>
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</table>

By consultation with a Division of Biology advisor a student may choose elective courses from Block C that allow a more specific focus on interest and experience. Areas of specialization would include prokaryotic microbiology, eukaryotic microbiology, biotechnology/genetic engineering, and infectious diseases. The microbiology curriculum coupled with appropriate electives provides an excellent education base for students moving directly into the job market, for students headed toward medical, dental, medical technology, and veterinary programs, and for students going into graduate programs in the biological sciences.

TO:

Microbiology degree

Students in microbiology may obtain either the BA or BS degree. The requirements for a microbiology major, in addition to those requirements of the College of Arts and Sciences, include blocks A, B, and C as listed below.

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<td>Genetics of Microorganisms</td>
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Block C: Microbiology major electives

Students must take an additional 13 hours from courses listed below. At least 7 of the 13 hours must be laboratory courses.

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By consultation with a Division of Biology advisor a student may choose elective courses from Block C that allow a more specific focus on interest and experience. Areas of specialization would include prokaryotic microbiology, eukaryotic microbiology, biotechnology/genetic engineering, and infectious diseases. The microbiology curriculum coupled with appropriate electives provides an excellent education base for students moving directly into the job market, for students headed toward medical, dental, medical technology, and veterinary programs, and for students going into graduate programs in the biological sciences.
RATIONALE: The Microbiology undergraduate curriculum has not undergone significant review in over 10 years. The Microbiology curriculum is used by bacteriologists, virologists, and immunologists and the topics covered in BIOL 541 (Cell Biology) are relevant to all groups, compared to the more limited relevance of BIOL 690 (Microbial Physiology and Metabolism).

EFFECTIVE DATE: Spring 2008

Dean of Arts and Sciences
CHANGE:
East Asian Studies minor

FROM:
Elective Courses (12 hours)

ECON 507. The Japanese Economy
GEOG 331: Introduction to Japan
GEOG 332: Introduction to China
GEOG 660. The Geography of East Asia/China
HIST 330. History of East Asian Civilizations
HIST 331: Introduction to Japan
HIST 332: Introduction to China
JAPAN 391: Culture of Japanese Communication
POLSC 511: Contemporary Chinese Politics

The following topics courses may also be used as electives, depending on the specific topic and subject to the approval of the academic director of the East Asian Studies minor:

ARCH 715: Theory of Design
ART 695: Topics in Art History/Art of Japan
EDCEP 786: Topics in Education
ENGL 580: Selected World Literature
HIST 598: Topics in Non-Western History
POLSC 791: Topics in Political Science

Other courses may be used as electives, as authorized at the discretion of the director.

TO:
Elective Courses (12 hours)

ECON 507. The Japanese Economy
GEOG 331: Introduction to Japan
GEOG 332: Introduction to China
GEOG 660. The Geography of East Asia/China
HIST 330. History of East Asian Civilizations
HIST 331: Introduction to Japan
HIST 332: Introduction to China
HIST 504: Intellectual History of Early China
HIST 507: China Since 1644
HIST 508: Introduction to Modern East Asia
HIST 509: Japan Since 1550
JAPAN 391: Culture of Japanese Communication
POLSC 511. Contemporary Chinese Politics
The following topics courses may also be used as electives, depending on the specific topic and subject to the approval of the academic director of the East Asian Studies minor:

ARCH 715: Theory of Design  
ART 695: Topics in Art History/Art of Japan  
EDCEP 786: Topics in Education  
ENGL 580: Selected World Literature  
HIST 598: Topics in Non-Western History  
POLSC 791: Topics in Political Science

Other courses may be used as electives, as authorized at the discretion of the director.

RATIONALE: The removal of HIST 504, 507, 508 and 509 last spring was not intended by the EAS faculty. These courses are directly relevant to the minor and should be restored to the list of approved electives as soon as possible.

EFFECTIVE DATE: Fall 2007

School of Journalism and Mass Communications  
(Page 120 of undergraduate catalog)

CHANGE:

Becoming a major

To become a major a student must have a 2.5 GPA based on at least 30 credit hours at the 100-level or higher. MC 110 and ECON 110 with grades of C or higher must be completed within the 30 hours.

TO:

Becoming a major

To become a major a student must have a 2.5 GPA based on at least 30 credit hours at the 100-level or higher and complete MC 110 with a grade of C or higher.

Transfer students must have completed a total of 30 credit hours before applying for admission to the major. Fifteen of those accumulated hours must be completed at K-State, where the students is expected to have earned a 2.5 minimum GPA on all transfer hours. MC 110 and ECON 110 (or their transferable equivalents) with grades of C or higher must be completed before applying to the major. No more than 3 credit hours out of 30 may be in MC 111, 120, 180, or 210.

RATIONALE: The Miller School faculty has voted to no longer require ECON 110. Additionally, since the current catalog was published, MC 112 (Web Communication in Society) has become an official class. The last sentence of the second paragraph is meant to keep majors from “loading up” on low level courses. We have added MC 112 to that group of classes.

EFFECTIVE DATE: Fall 2008
CHANGE:

Additional music requirements for instrumental emphasis
MUSIC 203, 204, 206, 207, and 9 semester hours chosen according to the major instrument from: MUSIC 232, 233, 234, 235, 427, 428, and 429.

Enrollments in major organizations must include at least two semesters in a choral organization; upon the recommendation of the advisor, one additional semester of individual or class instruction in voice may be substituted.

Additional requirements for vocal/choral emphasis
If voice is the major performance area, MUSIC 232, 233, 234, 235, 236, and 237; 6 hours of keyboard. If keyboard is the major performance area, MUSIC 203, 204, 232, 233, 234, 235, 350 (two semesters), 410 and 450.

Enrollments in major organizations must include at least two semesters in an instrumental organization; upon the recommendation of the advisor, one semester of advanced instrumental techniques classes may be substituted.

Requirements in general education are stated earlier in the College of Arts and Sciences section.

TO:

Additional music requirements for instrumental emphasis
MUSIC 203, 204, 206, 207, and 9 semester hours chosen according to the major instrument from: MUSIC 234, 235, 236, 237, 238, 239 and 427. If keyboard is the major performance area, 206 and 207 are not required.

Enrollments in major organizations must include at least two semesters in a choral organization, one of which must be MUSIC 112 – University Choir (2 credit hours).

Two semesters of MUSIC 113 – University Band (variable credit, 1-3 hours) are required.

Additional requirements for vocal/choral emphasis
If voice is the major performance area, MUSIC 234, 235, 236 or 237, and 239 or 239; 4 hours of keyboard. If keyboard is the major performance area, MUSIC 203, 204, 234, 235, 236 or 237, and 238 or 239, 350 (two semesters), 410 and 450.

Enrollments in major organizations must include at least two semesters in an instrumental organization, one of which must be MUSIC 113 – University Band (2 credit hours).

Two semesters of MUSIC 112 – University Choir (variable credit, 0-1 hours) are required.

Requirements in general education are stated earlier in the College of Arts and Sciences section.

RATIONALE: 1) Intensified learning on each instrument will enable a higher minimum performance proficiency and technical understanding. 2) This new format allows time for an expanded instrument repair unit. 3) Provides expanded teaching opportunities for students. 4) There will be less re-teaching associated with a divided course in the former structure.

EFFECTIVE DATE: Spring 2008
Department of Sociology, Anthropology and Social Work  
pg 150 of undergraduate catalog

**CHANGE:**

***Social Work***

Social Work is concerned with the interaction between people and their social environments. Social workers help people deal with other people, cope with the many social and environmental forces that affect and control daily life, and help solve problems that inhibit growth and development.

The undergraduate social work program is accredited by the Commission on Accreditation of the Council on Social Work Education to educate entry-level, generalist social work practitioners. The social work major is of particular value to students who intend to pursue a career in social work upon graduation.

The bachelor’s degree in social work is recognized as a beginning-level professional degree. Students graduating from the social work program are eligible for licensure as bachelor degree social workers in Kansas and numerous other states. No other bachelor’s degree is recognized, or necessary, for such eligibility. Students who wish to pursue graduate studies in social work will be eligible for advanced standing in many master of social work programs throughout the United States.

The intervention tasks performed by social workers are derived from a common base of knowledge, values, and skills. Thus, social workers are uniquely qualified to provide resources, services, and opportunities to individuals, groups, families, organizations, and communities. Students are required to complete a field practice placement during their senior year to integrate classroom material with practice experience in a professional setting.

Students wishing to declare a major in social work may enroll directly in curriculum SOCWK. This is a provisional admission to the social work program. Students must complete SOCWK 100, SOCWK 200, SOCWK 310 and SOCWK 515 before formal evaluation and admission to the program can occur.

Formal evaluation occurs prior to admission to SOCWK 560: Social Work Practice I, taken during the junior year. At that time, each student completes a personal statement and undergoes a formal review of academic and classroom performance by the program admissions committee. Students must have a 2.3 overall GPA and a 2.75 GPA in the core courses. Students successfully passing this review may enter the first course in the practice sequence, SOCWK 560.

Failure to meet and maintain the standards of the program will result in dismissal from the social work major. A student may be allowed to remain in the major on conditional or probationary status, but he or she must meet the standards of the program to complete the major.

For complete details on the admission requirements and procedure, see the program admissions policy in the student handbook. Appeals of program faculty decisions may be made through established departmental procedures.

A student earning a BA or BS in social work must complete 124 hours (students who entered K-State before the fall of 2003 require only 120 hours for graduation) including SOCWK 010: Orientation to the Social Work Major; SOCWK 260: Introduction to Social Work; 44 additional hours of major courses; and 25 hours of tool and related courses.

---

**TO:**

***Social Work***

Social Work is concerned with the interaction between people and their social environments. Social workers help people deal with other people, cope with the many social and environmental forces that affect and control daily life, and help solve problems that inhibit growth and development.

The undergraduate social work program is accredited by the Commission on Accreditation of the Council on Social Work Education to educate entry-level, generalist social work practitioners. The social work major is required for students who intend to pursue a career in social work in Kansas and in many other states. The major is also beneficial to students who plan to work with people.

The bachelor’s degree in social work is recognized as a beginning-level professional degree. Students graduating from the social work program are eligible for licensure as bachelor degree social workers in Kansas and numerous other states. No other bachelor’s degree is recognized, or necessary, for such eligibility. Students who wish to pursue graduate studies in social work will be eligible for advanced standing in many master of social work programs throughout the United States.

The intervention tasks performed by social workers are derived from a common base of knowledge, values, and skills. Thus, social workers are uniquely qualified to provide resources, services, and opportunities to individuals, groups, families, organizations, and communities. Students are required to complete a field practice placement during their senior year to integrate classroom material with practice experience in a professional setting.

Students wishing to declare a major in social work may enroll directly in curriculum SOCWK. This is a provisional admission to the social work program. Students must complete SOCWK 100, SOCWK 200, SOCWK 315 and SOCWK 510 before formal evaluation and admission to the program can occur.

Formal evaluation occurs prior to admission to SOCWK 560: Social Work Practice I, taken during the junior year. At that time each student completes a personal statement and undergoes a formal review of academic and classroom performance by the program admissions committee. Students must have a 2.3 overall GPA and a 2.75 GPA in the core courses. Students successfully passing this review may enter the first course in the practice sequence, SOCWK 560.

Failure to meet and maintain the standards of the program will result in dismissal from the social work major. A student may be allowed to remain in the major on conditional or probationary status, but he or she must meet the standards of the program to complete the major.

For complete details on the admissions requirements and procedure, see the program admissions policy and procedure in the student handbook. Appeals of program faculty decisions may be made through established departmental procedures.

A student earning a BA or BS in social work must complete 124 hours, including SOCWK 100, Introduction to Social Work; 47 additional hours of major courses; and 19 hours of tool and related courses; and STAT 325.
**CHANGE:**

<table>
<thead>
<tr>
<th>Human Behavior and the social environment content</th>
<th>Tool and related courses - required (13 hrs.)</th>
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<tbody>
<tr>
<td>SOCIO 211 Introduction to Sociology</td>
<td>SOCIO 211 Introduction to Sociology</td>
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<tr>
<td>ANTH 200/204 Introduction to Cultural Anthropology</td>
<td>ANTH 200/204 Introduction to Cultural Anthropology</td>
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<tr>
<td>PSYCH 110 General Psychology</td>
<td>PSYCH 110 General Psychology</td>
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<tr>
<td>FSHS 110 Introduction to Human Development</td>
<td>BIOL 198 Principles of Biology</td>
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<td>SOCWK 515 Human Behavior and the</td>
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<tr>
<td>Social Environment</td>
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<td>SOCWK 525 Human Behavior and the</td>
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<td>Social Environment II</td>
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<td>POLSC 110 Introduction to Political Science</td>
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<td>POLSC 301 Introduction to Political Thought</td>
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<td>ECON 110 Principles of Microeconomics</td>
<td>ECON 110 Principles of Microeconomics</td>
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<td>ECON 120 Principles of Macroeconomics</td>
<td>ECON 120 Principles of Macroeconomics</td>
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<td>BIOL 198 Principles of Biology</td>
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<th>Social work practice content</th>
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<td>SOCWK 561 Social Work Practice II</td>
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<td>SOCWK 568 Social Work Practice III</td>
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<td>SOCWK 570 Social Work with Groups</td>
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<td>SOCWK 330 Introduction to Social Work Research</td>
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<tr>
<td>SOCWK 530 Sem. in Applied Social Work Research</td>
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<td>SOCWK 550 Field Practicum Preparation</td>
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<tr>
<td>SOCWK 510 Social Welfare as a Social Institution</td>
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<td>SOCWK 565 Program and Policy Formulation and Analysis</td>
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<th>Field practicum</th>
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<td>SOCWK 562 Field Experience</td>
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<th>Professional social work seminar</th>
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<tr>
<td>SOCWK 564 Social Work Professional Seminar</td>
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**RATIONALE:** The college catalog changes identified represent course description changes and changes in the social work major.

**EFFECTIVE DATE:** Spring 2008
Introduction

The Midwest Institute for Comparative Stem Cell Biotechnology (the Institute) was created in 2005 based upon emerging research and intellectual property development resulting from the discovery by Kansas State University personnel of a stem cell population in the matrix of the umbilical cord of humans and also domestic and laboratory animals. A website has been created for the institute: http://www.vet.ksu.edu/research/stemcell/index.htm

As is apparent from the website, stem cell research, development of related intellectual property and education in stem cell-related biotechnology are the primary goals. Significant progress has been made in research. All components of the pending patent have been licensed. Fees paid, while confidential under the licensing agreement, are the largest licensing fees ever received by the KSU research foundation by a large margin. The third element of the Institute’s aims, education, is the subject of the present proposal.

Learning objectives

The overarching purpose of the proposed certificate program is to add value to other degrees in the biological and life sciences, specifically including animal sciences, veterinary medicine, biology and biochemistry.

Specific learning objectives are enumerated in the assessment plan.

Courses

The core courses in the certificate are:

**AP 711. Stem Cells and Comparative Biomedicine.** (2) II, S. Characteristics of major categories of stem cells. Applicable or potential clinical uses, including their utilization in tissue engineering or targeted delivery of therapeutics.

**AP 850 Stem Cell Techniques.** (2) I, S. Cellular and molecular techniques and techniques on tissue culture. Lecture and laboratory hours to be determined.

**ASI 802. Gametes, Embryos, and Stem Cells in Farm Animals.** (2) I, in odd years. A study of gametes, embryos, pregnancy, and stem cells in farm species including supporting information from laboratory species and humans. Emphasis will be on the regulation of stem cells, gametes, and embryos and on the conceptus-maternal interactions to establish and maintain pregnancy and program conceptus and postnatal development. Two hours lec. a week. Pr.: BIOCH 521.

**ASI 902 Topics in Stem Cell Biotechnology.** (1) A journal club course in stem cell biotechnology in fall semesters. One semester is required. It can be repeated twice for a total of three credits in the stem cell certificate. Students will evaluate the contribution of scientific papers to the field of stem
cell biology, present scientific data, lead discussions of scientific literature, and become familiar with current concepts in the field of stem cell biology and biotechnology.

Elective courses for emphasis in research or entrepreneurship are:

**AP 710 Microanatomy.** Origin, development and microscopic structure of the cells and tissues for the animal body. Three hours lecture and six hours lab/week. Pr: First year standing in college of veterinary medicine. Fall semester.

**AP 995. Problems in Physiology.** (Var.) I, II, S. Special problem-involving techniques utilized in studying the function of various organ systems of the body. Pr.: Consent of instructor.

**ASI 600. Applied Animal Biotechnology.** (2) II. Emphasis will be placed on the current and future of animals in biotechnology related to food production as well as human medicine applications. Rec. Pr.: Senior standing, BIOCH 521 and ASI 500.

**ASI 961. Graduate Problem in Animal Sciences and Industry.** (1-3) I, II, S. In-depth study of a topic supervised by a member of the graduate faculty. Pr.: Permission of supervising faculty member.

**BIOL 510. Developmental Biology.** (3) II. Introduction to the stages and mechanisms of embryonic animal development. Integrated approach that includes classic experimental embryology and the genetic and molecular regulation of invertebrate and vertebrate animal development. Three hours lec. per week. Pr.: BIOL 450.

**BIOL 670. Immunology.** (4) II. Chemical, genetic, and biological properties of the immune response, acquired immunity, and antibody production. Pr.: Two courses in biology; and a course in biochemistry or equiv.

**BIOL 671. Immunology Lab.** (2) II. Laboratory exercises in immunology. Pr.: BIOL 670 or conc. enrollment. Three-hour lab a week plus one hour rec.

**BIOL 705. Eukaryotic Genetics.** (3) I. An integrated exploration of transmission genetics and molecular genetics of eukaryotic organisms. The focus will be on genetic model organisms and their contributions to our understanding of mechanisms of genetic transmission and exchange, mutagenesis, gene expression, and regulation of cell division and development. Modern approaches to genomic analysis will be discussed. Pr.: BIOL 450 and BIOCH 521.

**BIOL 707. Advanced Cell Biology.** (3) I. Selected current topics in cell biology which reflect recent advances in the field. Major topics include membranes and transport, protein sorting, signal transduction, cell adhesion and motility, cell cycle, apoptosis, and specialized cell functions. Pr.: BIOL 541.

**BIOL 886. Confocal, Fluorescence and Light Microscopy.** (3) I, in odd years. An introduction to theories, functions and applications of confocal, fluorescence and light microscopy, and fluorescent
molecules. Lab emphasis on students working on independent research projects requiring microscopy. Two hours of lecture and three hours of lab per week.

**DMP 705. Principles of Veterinary Immunology.** (2) II. Innate and adaptive defense mechanisms in domestic animals. Topics include vaccinology, immunopathology, autoimmunity, immunodeficiency, and immunomodulation. Pr.: BIOCH 521 and BIOL 455

**DMP 850. Immunology of Domestic Animals.** (3) I. This course is designed to introduce graduate students to immune responses of domestic animals to pathogens and parasites. Pr.: BIOL 541.


**MANGT 845 Technology Entrepreneurship and Strategies.** (3) No pre-requisites other than enrollment in graduate school. This is an evening course taught by Professor Katz and two practitioners in the technology entrepreneurship field.

**GRAD 820. Leadership Practicum.** (3) I, II. Develops the connections between leadership theory and practice. By conducting a practicum project, students demonstrate the ability to apply concepts and ideas from the study of leadership to a practical leadership problem within an organization. Pr.: GRAD 801 and MANGT 845. The practicum will be developed for stem cell certificate students with the theme “Leading an innovation to market”.

**PLPTH 610. Biotechnology.** (3) I. The use of biotechnology and molecular genetic approaches in plant and animal sciences. Emphasis is on the use of molecular techniques for plant and animal improvement. Three hours lec. per week. Pr.: ASI 500. Same as AGRON 610.

### Requirements

Students with graduate standing and a 3.0 GPA in a field in the biological sciences or with a cumulative GPA of 3.0 or higher in the DVM curriculum are eligible to enroll. Exceptions are possible upon approval by the coordinator in consultation with the faculty.

Fifteen hours are required:
AP850, ASI802, ASI902 and AP711 are required. ASI 902 may be taken either two or three times.

Any three of the remaining courses qualify for the remaining credit hour requirements. If BIOL707 is taken, BIOL541 may be required as a pre-requisite.

### Meeting learning objectives

The core courses (AP711, AP850, ASI802, ASI902) are designed to ensure a benchmark level of knowledge about stem cell biotechnology. Elective courses are intended to allow for: (1) specific advancement toward research competence in the field or (2) commercialization of stem cell and related technology.
Courses in the certificate may be included in graduate programs upon approval of the student’s major professor and advisory committee. Inclusion of courses from other institutions and programs may be substituted for credit in the certificate in stem cell biotechnology with the approval of the program director in consultation with associated faculty.

**Need for the proposed program**

Stem cell biotechnology and regenerative medicine are emerging as central to the future of human and animal medicine and animal production. A supply of new scientists in basic disciplines with orientation to, or specific training in, stem cell biotechnology will be a necessary part of advancing this area of science, especially as political and social issues are untangled. The research and entrepreneurship tracks provided in the program will allow career flexibility that is becoming an ever-greater necessity for students.

It seems evident that, at this stage of the Institute’s development, a graduate level certificate is best suited to capitalize upon the on-going research and intellectual property development. Once a certificate program is successfully established and a significant track record has accrued, consideration will be given to proposal of an interdisciplinary degree. However that would be premature at this juncture and in the near future.

The target audience for the proposed certificate includes graduate students in all the biological sciences, specifically including animal science, veterinary medicine, biology and biochemistry. Also some residents in clinical medicine and surgery may find it advantageous to gain increased expertise in the rising field of regenerative medicine. In addition students in the DVM curriculum that have aspirations toward research or corporate careers would find the certificate in stem cell biotechnology valuable.

**Organization and Administration**

The governing faculty for the certificate in stem cell biotechnology is comprised of the Kansas State University Founding Fellows of the Midwest Institute for Comparative Stem Cell Biology (see website [http://www.vet.ksu.edu/research/stemcell/index.htm](http://www.vet.ksu.edu/research/stemcell/index.htm)). The program director will be Duane L. Davis.

The administrative home of the certificate program will be the Institute. The governance of the Institute is explained on the website. Briefly, the Institute is situated administratively in the Office of the Vice President for Research. Oversight is provided by a liaison committee comprised of the Vice President for Research, the Dean of the College of Veterinary Medicine, the Dean of the College of Agriculture and the Vice Chancellor for Research of the University of Kansas Medical Center and an Executive Committee described in the website.

An extensive list of scientists and other faculty members are affiliated with the institute and are listed in the website. These individuals provide a ready source of highly qualified advisors to students in the certificate program.
Budget
The budget is anticipated to be nominal in that all of these courses in the program will be taught for other purposes also.

Faculty
The Founding Fellows of the institute at Kansas State University are Dr. Duane Davis, ASI; Dr. Deryl Troyer, AP; Dr. Mark Weiss, AP. These individuals, along with the program director, will supervise the program.

Program Director
The program director will be Dr. Duane L. Davis, Professor of Animal Sciences and Industry.

Learning outcomes and assessment
Learning outcomes and an assessment plan is attached.
Cover Sheet for Student Learning Outcomes

Directions: For each program (e.g., degree, certificate, minor, secondary major, etc.) and level (undergraduate and graduate), please complete separate cover sheets. Feel free to make copies of this sheet if needed. Those graduate programs with an integrated master’s and doctoral program may provide one set of cover sheets.

Department / Unit: Midwest Institute for Comparative Stem Cell Biology
Title of Academic Program: Graduate Certificate in Stem Cell Biotechnology

Faculty contact(s) for the list of student learning outcomes for this academic program:

Duane Davis

Type of Degree (check one):

☐ Bachelor’s ☐ Master’s ☐ Ph.D. ☐ Ed.D.
☐ U. Certificate ☐ Minor ☐ Secondary major ☐ Associate
☒ G. Certificate
☐ Joint Degree (list the degree types): ________________
☐ Other: ______________________________

List of Student Learning Outcomes for this Degree Program
Please provide an attached list of learning outcomes or copy and insert them below.

1. Students completing the Graduate Certificate in Stem Cell Biotechnology will know cellular and molecular qualities that define stem cells; where stem cells may be found; and how stem cells can be isolated.

2. Students completing the Graduate Certificate in Stem Cell Biotechnology will posses the knowledge and skills that allow them to critically evaluate the peer-reviewed literature in stem cell biology.

3. Students completing the Graduate Certificate in Stem Cell Biotechnology will understand the emerging areas of application of stem cells in regenerative medicine and food animal health and production.
4. Students completing the Graduate Certificate in Stem Cell Biotechnology will possess skills in culture of mammalian stem cells.

5. Students completing the Graduate Certificate in Stem Cell Biotechnology will possess the knowledge, skills and social understanding to critically evaluate and articulate the range of ethical issues associated with stem cell biology.
Please check the description(s) that best reflect the information being submitted.

<table>
<thead>
<tr>
<th></th>
<th>Faculty for The Midwest Institute for Comparative Stem Cell Biology have reviewed and endorse the list of student learning outcomes being submitted.</th>
<th>Date of Endorsement:</th>
</tr>
</thead>
</table>

Director, Midwest for Comparative Stem Cell Biology  
Signature  
Date

Dean of the Graduate School’s Signature  
(Required for Graduate Degree Programs)  
Date
Check the box if your program’s student learning outcomes have been modified since November 2003. If so, please email (apr@ksu.edu) or attach a hard copy to this document.

College, Department, and Date
Colleges: Veterinary Medicine and Agriculture
Department: Anatomy and Physiology; Animal Sciences and Industry
Date: February 23, 2007

Contact Person(s) for the Assessment Plans
Dr. Duane Davis

Degree Program
Graduate Certificate in Stem Cell Biotechnology

Assessment of Student Learning Three-Year Plan
Student learning outcomes:

1. Students completing the Graduate Certificate in Stem Cell Biotechnology will know cellular and molecular qualities that define stem cells; where stem cells may be found; and how stem cells can be isolated.

2. Students completing the Graduate Certificate in Stem Cell Biotechnology will possess the knowledge and skills that allow them to critically evaluate the peer-reviewed literature in stem cell biology.

5. Students completing the Graduate Certificate in Stem Cell Biotechnology will possess the knowledge, skills and social understanding to critically evaluate and articulate the range of ethical issues associated with stem cell biotechnology.

Relationship to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):
<table>
<thead>
<tr>
<th>Program SLOs</th>
<th>Knowledge</th>
<th>Skills</th>
<th>Attitudes and Professional Conduct</th>
<th>Program SLO is consistent with University SLO.</th>
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<tbody>
<tr>
<td>1. Know cellular and molecular qualities that define stem cells; where stem cells may be found; and how stem cells can be isolated.</td>
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<tr>
<td>2. Possess the knowledge and skills that allow them to critically evaluate the peer-reviewed literature in stem cell</td>
<td>X</td>
<td>X</td>
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</table>
5. Posses the knowledge, skills and social understanding to critically evaluate and articulate the range of ethical issues associated with stem cell biology.

Program SLO is consistent with University SLO.

How will the learning outcomes be assessed? What groups will be included in the assessment?

<table>
<thead>
<tr>
<th>Program SLOs</th>
<th>University-wide SLOs (Graduate Programs)</th>
<th>Program SLO is conceptually different from university SLOs</th>
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</thead>
<tbody>
<tr>
<td>1. Know cellular and molecular</td>
<td>1. Direct measure—Capstone</td>
<td>Program SLO is consistent with University SLO.</td>
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<tr>
<td>qualities that define stem cells; where stem cells may be found; and how stem cells can be isolated.</td>
<td>exam.</td>
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<tr>
<td>2. Indirect measure—Career placement of certificate graduates.</td>
<td>1. Direct measure—Oral paper presentations and participation in paper discussions in ASI 902 Topic/Stem Cell Biotechnology.</td>
<td>Program SLO is consistent with University SLO.</td>
</tr>
<tr>
<td>2. Posses the knowledge and skills that allow them to critically evaluate the peer-reviewed literature in stem cell biology.</td>
<td>1. Direct measure—Paper presentations and participation in paper discussions in ASI 902 Topic/Stem Cell Biotechnology.</td>
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</tr>
<tr>
<td>1. Direct measure—Oral paper presentations and participation in paper discussions in ASI 902 Topic/Stem Cell Biotechnology.</td>
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<tr>
<td>5. Posses the knowledge, skills and social</td>
<td>1. Direct measure—Attitude survey administered in ASI 902 Topics/Stem Cell</td>
<td>Program SLO is consistent with University SLO.</td>
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understanding to critically evaluate and articulate the range of ethical issues associated with stem cell Biotechnology.

When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?

1. Students completing the Graduate Certificate in Stem Cell Biotechnology will know cellular and molecular qualities that define stem cells; where stem cells may be found; and how stem cells can be isolated.

   a. Upon completion of the coursework requirements for the Graduate Certificate in Stem Cell Biotechnology, all certificate seeking students will be expected to take a web-based comprehensive capstone exam covering fundamental aspects of stem cell biology (exam will be updated annually to reflect new developments in the field). Results of the exam will be shared with individual students upon completion. It is expected that students completing the Certificate will score 80% or greater on the capstone exam. It is recommended that Ph.D. students take the exam prior to, or as a part of, their preliminary examinations and, at the discretion of their graduate committee, it could serve as a part of the determination of their readiness to enter candidacy for the Ph. D. degree.

   b. Core scientists in teaching courses and conducting research through the Midwest Institute for Comparative Stem Cell Biology will be heavily engaged in training students that ultimately are awarded the Graduate Certificate in Stem Cell Biotechnology. It is expected that these students will secure employment in academia or allied industries in biomedical sciences. Therefore, placement of all graduate and DVM students after completion of their degrees will be tracked to gain indirect evidence that the Certificate may be adding value to master, doctoral and DVM degrees. Data will be gathered via a web-based survey of graduates administered within 12 months of graduation.

2. Students completing the Graduate Certificate in Stem Cell Biotechnology will possess the knowledge and skills that allow them to critically evaluate the peer-reviewed literature in stem cell biology.

   a. All students completing the Graduate Certificate will be required to enroll in ASI 902 Topics/Stem Cell Biotechnology. A rubric has been developed (attached) to assess student’s working knowledge of stem cell biology as well as their oral communication skills in discussing stem cell biology.
3. Students completing the Graduate Certificate in Stem Cell Biotechnology will understand and have the skills to articulate the emerging areas of application of stem cells in regenerative medicine and food animal health and production.

4. Students completing the Graduate Certificate in Stem Cell Biotechnology will possess skills in culture of mammalian stem cells.

5. Students completing the Graduate Certificate in Stem Cell Biotechnology will possess the knowledge, skills and social understanding to critically evaluate and articulate the range of ethical issues associated with stem cell biology.

   a. All students will complete a survey that evaluates attitudes toward the diversity of ethical views surrounding the use of stem cells in animal research and therapeutics. The ability of students to be tolerant and understanding of diverse views will make them more effective professionals once in the workplace. This web-based survey will be updated annually to include developing concerns and views and will be administered to all students in their first semester of enrollment in ASI 802 and again in their final semester in ASI 902 (coincident with completion of the coursework requirements for the Certificate). Completion of both surveys will be a requirement for successful completion of the Certificate.

What is the unit’s process for using assessment results to improve student learning?

The faculty coordinator for ASI 902 in each fall semester offering of the course will be responsible for summarizing assessment data for Certificate graduates from the previous academic year, as well as comprehensive data accumulated from all Certificate graduates (at least three years may be required to accumulate sufficient numbers of Certificate graduates to obtain some measure of reliability of the data). The data will be presented to both core faculty and graduate students sometime during the first four meetings of ASI 902. The data will be discussed (among faculty and students) and where results of assessment point to failure to attain the expected outcome, a corrective course of action will be recommended. This course of action may point to appropriate changes in curriculum and(or) fine tuning of assessment tools.