
Agenda for the October 11, 2012 CAA Meeting

Items Approved: 12-59, CMN 3500, New Media Practices. (Revised Course)
12-60, MAT 3501, Differential Equations I. (Revised Course)
12-61, MAT 3502, Differential Equations II. (Revised Course)
12-62, MAT 4170, Programming for Mobile Devices. (New Course)
12-63, MAT 4873, Introduction to Cryptography. (New Course)
12-64, Mathematics & Computer Science. (Revised Program)
12-67, ELE 1050, Introduction to Teaching as a Profession. (New Course)
12-68, ELE 2050, The Whole Child: Teaching and Learning in the Educational Environment. (New Course)
12-69, ELE 3050, Diverse Contexts that Influence the Learning Process. (New Course)
12-70, ELE 3350, Language Arts in the Elementary and Middle Level School. (Revised Course)
12-71, ELE 4100, Assessing Student Learning: A Field-Based Experience. (New Course)
12-72, ELE/MLE 4280, Content Area Reading in the Elementary, Middle and Secondary School. (Revised Course)
12-73, ELE 4890, Culturally and Linguistically Diverse Students/English Language Learners: Instruction Methods. (New Course)
12-74, MLE 4100, Assessing Student Learning: A Field-Based Experience. (New Course)

Items Pending: 11-117, Review of Integration, Instructional Practices, and Effectiveness of EIU's four University Learning Goals (Ongoing)
11-132R, Course Proposal Format Form (Revised Form)
12-54C R, Revisions to the catalog copy for the following sections of the Undergraduate Catalog: General Education, Academic Regulations, Course Information, and Honors College.
12-65, HIC 2000G, Introduction to the Humanities: Interdisciplinary Problem-Solving. (New Course)
12-66, EIU 4100G, Senior Seminar: Advanced Interdisciplinary Studies in Matters of Culture. (Revised Course)
12-75, Resolution from CAA regarding the Department Application of Criteria (Proposed Resolution)

**Council on Academic Affairs
Minutes**

October 11, 2012

The October 11, 2012 meeting of the Council on Academic Affairs was held at 2:05 p.m. in Room 4440, Booth Library.

Members Present: Dr. Collins, Ms. English, Ms. Eskew, Ms. Green, Dr. Klarup, Dr. Lucas, Dr. Reid, Dr. Rhoads, Ms. Ruholl, Dr. Steinke, Dr. Throneburg, Ms. Upton, and Dr. White.

Members Absent: None.

Staff Present: Ms. Fopay.

Guest Present: Dr. Andrews, Mathematics & Computer Science; Dr. Bickford, Early Childhood, Elementary, & Middle Level Education; Associate Dean Bower, College of Education & Professional Studies; Mr. Bradd, Communication Studies; Dr. Carter, Early Childhood, Elementary, & Middle Level Education; Dean Irwin, College of Arts & Humanities; Dean Jackman, College of Education & Professional Studies; Ms. Markham, *Daily Eastern News*; Dr. Reven, Early Childhood, Elementary, & Middle Level Education; Dr. Russell, Early Childhood, Elementary, & Middle Level Education, and Dr. Walus, Communication Studies.

I. Approval of the October 4, 2012 CAA Meeting Minutes.

The minutes of October 4, 2012 were approved as written.

II. Communications:

a. Waiver Reports:

1. Academic Waiver Reports for September 2012 from College of Education & Professional Studies.

III. Committee Reports:

1. Ms. Green reported that the Enrollment Management Advisory Committee meetings have been temporarily suspended until the Assistant Vice President for Enrollment Management position is filled.
2. Dr. White reported that he will represent CAA on the new Program Analysis Steering Committee being formed by President Perry.
3. Dr. Lucas reported on the Electronic and Online Learning Materials Taskforce. In addition, he reported on the CAA's Learning Goals Committee.

IV. Item Added to the Agenda:

At the meeting, Dr. Lucas distributed copies of draft resolution regarding department application of criteria. He indicated the resolution was prepared after discussion of the topic at last week's CAA's Learning Goals Committee meeting.

Dr. Lucas moved and Ms. Ruholl seconded the motion to add the draft resolution to the agenda.

The item will be discussed at a future CAA meeting.

Note: This item has been assigned agenda item number 12-75.

V. Items Acted Upon:**1. 12-59, CMN 3500, New Media Practices. (Revised Course).**

Mr. Bradd and Dr. Walus presented the proposal and answered questions of the council.

Dr. Collins moved and Ms. Eskew seconded the motion to approve the proposal. The motion passed unanimously.

The proposal was approved, effective Spring 2013.

CMN 3500. New Media Practices. (2-2-3) On Demand. This workshop-based course introduces students to cross-platform digital production with an emphasis in branding, framing, narrative, and deploying symbols across various new media. This course melds social media and public relations with audio/visual production skills in order to communicate a unified message across various media in a constantly changing new media environment. Prerequisites: CMN 2520 and CMN 2920 or JOU 3920.

2. 12-60, MAT 3501, Differential Equations I. (Revised Course).

Dr. Andrews presented the proposal and answered questions of the council.

Dr. Klarup moved and Dr. Steinke seconded the motion to approve the proposal. The motion passed unanimously.

The proposal was approved, effective Spring 2013.

MAT 3501. Differential Equations I. (3-0-3) F, S. Techniques and applications of ordinary differential equations. First order ordinary differential equations and higher order linear equations. An introduction to partial differential equations, Fourier series, boundary value problems and Sturm-Liouville theory. EGR 904; MTH 912 Prerequisites: MAT 2443 – may be taken concurrently with MAT 2442.

3. 12-61, MAT 3502, Differential Equations II. (Revised Course).

Dr. Andrews presented the proposal and answered questions of the council. The council requested revisions to the proposal.

Ms. Green moved and Ms. English seconded the motion to approve the proposal. The motion passed unanimously.

The proposal, with revisions, was approved, effective Spring 2013.

MAT 3502. Differential Equations II. (3-0-3) S. Systems of differential equations, non-linear differential equations and stability, phase plane analysis, series solutions, other topics as needed. Prerequisites: MAT 2443 and MAT 3501.

4. 12-62, MAT 4170, Programming for Mobile Devices. (New Course).

Dr. Andrews presented the proposal and answered questions of the council.

Ms. Upton arrived during the presentation of this agenda item.

Dr. Rhoads moved and Dr. Klarup seconded the motion to approve the proposal. The motion passed unanimously.

The proposal was approved, effective Fall 2014.

MAT 4170. Programming for Mobile Devices. (3-0-3) F. Mobile devices have interesting hardware (such as multi-touch screens, gyroscopes, and accelerometers), networking options (cellular, WiFi, and Bluetooth) and application programming interfaces. These elements combine to form a very exciting programming platform. Developing applications for mobile devices presents new challenges and capabilities. This class introduces some of the ways to overcome these difficulties and how to capitalize on the features of mobile devices. Prerequisite: C or better in MAT 3870.

5. 12-63, MAT 4873, Introduction to Cryptography. (New Course).

Dr. Andrews presented the proposal and answered questions of the council.

Ms. Green moved and Dr. Klarup seconded the motion to approve the proposal. The motion passed unanimously.

The proposal was approved, effective Spring 2014.

MAT 4873. Introduction to Cryptography. (3-0-3) S. Classical monoalphabetic cryptosystems (e.g. shift, affine, substitution, and permutation ciphers), classical polyalphabetic cryptosystems (e.g. Hill and Vigenère ciphers), linear feedback shift registers, modern cryptosystems (public key, stream, and block ciphers). Other topics (with particular interest to topics relevant to current events) will be considered, such as: anonymity, identification schemes, secret sharing schemes, multicast security, copyright protection, bit commitment, signature schemes, one-way hash functions, pseudo-random numbers, and electronic cash. Prerequisites: C or better in either MAT 2345 or MAT 2800, AND C or better in both MAT 2170 and MAT 2550.

6. 12-64, Mathematics & Computer Science. (Revised Program).

Dr. Andrews presented the proposal. There were no questions.

Dr. Steinke moved and Ms. Ruholl seconded the motion to approve the proposal. The motion passed unanimously.

The proposal (**See Attachment A**) was approved, effective Fall 2013.

Dr. White introduced Ms. Shari Upton who joined the meeting during the presentation of agenda item 12-62. Ms. Upton will serve as a student representative on CAA.

7. 12-67, ELE 1050, Introduction to Teaching as a Profession. (New Course).

Dr. Russell, Dr. Carter, Dr. Bickford, and Dr. Reven presented the proposal and answered questions of the council.

Dr. Rhoads moved and Ms. Green seconded the motion to approve the proposal. The motion passed with the following vote:

Yes: Collins, English, Eskew, Green, Klarup, Lucas, Rhoads, Ruholl, Steinke, Throneburg, Upton, and White.
No: Reid.
Abstain: None.

The proposal was approved, effective Fall 2013.

ELE 1050. Introduction to Teaching as a Profession. (1-0-1) F, S. Teaching as a Profession.

This course is designed to enhance the transition, integration and retention of freshmen and transfer students who wish to pursue a career in Early Childhood, Elementary and Middle Level education. Students will be introduced to the EC/ELE/MLE program, with particular emphasis on the specific skill sets and dispositions necessary for success in the major. WA

8. 12-68, ELE 2050, The Whole Child: Teaching and Learning in the Educational Environment. (New Course).

Dr. Russell and Dr. Carter presented the proposal and answered questions of the council.

Dr. Lucas left the meeting at 2:55 p.m. during the presentation of this item.

Ms. English moved and Ms. Eskew seconded the motion to approve the proposal. The motion passed unanimously.

The proposal was approved, effective Fall 2013. *Note: This course deletes ELE 2000, 2320, and 2321.*

ELE 2050. The Whole Child: Teaching and Learning in the Educational Environment. (3-1-3)

F, S. The Whole Child. This course is designed to introduce students to the influences that development (physical, social and emotional, cognitive, linguistic), past experience, prior knowledge, economic circumstances and issues of diversity have on the learning process. Educational beginnings, curricular trends, professional issues in teaching, characteristics of schools and other learning environments will be explored. Students will become familiar with professional dispositions and begin to practice habits of positive dispositional behavior both in and out of the classroom. Students will complete a minimum of 30 observation hours of preschool through middle school environments. Prerequisite: ELE 1050. For transfer students, concurrent enrollment in ELE 1050 during the semester they enroll in ELE 2050 will be permitted with department chair approval. WA

9. 12-69, ELE 3050, Diverse Contexts that Influence the Learning Process. (New Course).

Dr. Russell, Dr. Carter, and Dr. Reven presented the proposal and answered questions of the council. The council requested revisions to the proposal.

Dr. Rhoads moved and Ms. Ruholl seconded the motion to approve the proposal. The motion passed unanimously.

The proposal, with revisions, was approved, effective Fall 2013.

ELE 3050. Diverse Contexts that Influence the Learning Process. (2-1-2) F, S. On Demand.

The purpose of this course is to provide opportunities for pre-service teachers to identify qualities and potential within themselves to better the lives of children. This course is based on the premise that today's educator must be adept at collaborating with school personnel, family and community to provide a high quality of education for all students. In this course, pre-service teachers will consider how to transition from being a student of teaching to being a teacher of students through careful analysis and understanding of the entire learning dynamic. Students will participate in a minimum of 30 contact hours in a broad spectrum of integrated field experiences to foster growth as a complete educator. This course is restricted to Elementary majors (general and middle school options), dual special education/elementary education majors, and post baccalaureate teacher certification majors who have met all prerequisites. Prerequisites: ELE 1050 and ELE 2050 or equivalent, and the passing of the Test of Academic Proficiency (TAP) or an ACT composite score (with writing portion) of 22 or higher including an expectation of Junior standing. For transfer students, concurrent enrollment in ELE 1050 will be permitted with department chair approval.

Note: During the meeting there was a question regarding whether a transfer student could enroll in ELE 1050 or ELE 2050 concurrently with this course if given permission by the department chair. At that time, Dr. Russell answered yes to that question. However, after the meeting, she realized she was wrong and clarified that

only ELE 1050 would be allowed. Therefore, the last sentence under Part I, 8 b. of the proposal should remain as "For transfer students, concurrent enrollment in ELE 1050 will be permitted with department chair approval."

10. 12-70, ELE 3350, Language Arts in the Elementary and Middle Level School. (Revised Course).

Dr. Russell and Dr. Carter presented the proposal and answered questions of the council. The council requested revisions to the proposal.

Ms. Ruholl moved and Dr. English seconded the motion to approve the proposal. The motion passed unanimously.

The proposal, with revisions, was approved, effective Fall 2013.

ELE 3350. Language Arts in the Elementary and Middle Level School. (3-0-3) Language Arts in ELE/MLE. This course addresses learning objectives, the research base, instructional methods, and materials for teaching and evaluating the language arts which have been aligned with the Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects. The course also addresses the recommendations set forth by the National Council of Teachers of English (NCTE) and the International Reading Association (IRA). This course is restricted to teacher education candidates who have successfully met University teacher education requirements and departmental requirements. **Prerequisites:** ELE 3050. University Teacher Education requirements apply and department requirements for enrollment must be met, including an expectation of second semester Junior standing. **Co-requisites:** *Elementary General Option:* ELE 3100, ELE 3280, ELE 3340; or *Middle Level Education Option:* MLE 3110, and MLE 4760.

Dr. Collins left the meeting at 3:20 p.m. following the vote of agenda item 12-70.

11. 12-71, ELE 4100, Assessing Student Learning: A Field-Based Experience. (New Course).

Dr. Russell and Dr. Carter presented the proposal and answered questions of the council. The council requested revisions to the proposal.

Ms. Green moved and Ms. Eskew seconded the motion to approve the proposal. The motion passed unanimously.

The proposal, with revisions, was approved, effective Fall 2013. *Note: This course deletes ELE 4000.*

ELE 4100. Assessing Student Learning: A Field-Based Experience. (2-3-3) F, S. On Demand. Assessing Student Learning. This course emphasizes monitoring children's learning through data-driven assessment in order to meet the needs of diverse learners. Major topics will include effective classroom management and developing positive teaching dispositions in order to become a reflective practitioner. This course includes class meeting times and supervised field experiences (minimum 60 hours). This course is restricted to Elementary General Option and/or Early Childhood, Special Education majors and Post Baccalaureate Teacher Certification who have met all pre-requisites. **Prerequisites:** *Elementary General option:* ELE 3100, 3280, 3340, and 3350; or *Early Childhood:* ELE 3250, 3281, and 4775. University Teacher Education requirements apply, and department requirements for enrollment must be met. **Co-requisites:** *Elementary General option:* ELE 3290, 4280, and 4880; or *Early Childhood:* ELE 4770, 4280, and 4880. WA

12. 12-72, ELE/MLE 4280, Content Area Reading in the Elementary, Middle and Secondary School. (Revised Course).

Dr. Russell, Dr. Carter, Dr. Reven, and Dr. Bickford presented the proposal and answered questions of the council. The council requested revisions to the proposal.

Dr. Rhoads moved and Ms. Green seconded the motion to approve the proposal. The motion passed unanimously.

The proposal, with revisions, was approved, effective Fall 2013.

ELE/MLE 4280. Content Area Reading in the Elementary, Middle and Secondary School. (3-0-3) Content Area Reading. Strategies and techniques for providing appropriate content area reading instruction for students in preschool through grade twelve. This course is restricted to teacher education candidates who have successfully met the University teacher education requirements and departmental requirements. **Prerequisites:** ELE 3281 for early childhood; ELE 3280 for elementary; ELE 3280 and MLE 3110 for middle level; or permission of department chair. University teacher education requirements apply and department requirements for enrollment must be met. **Co-requisites:** *Early Childhood:* ELE 4100, 4770, and 4880; or *Elementary:* ELE 4100, 3290, and 4880; or *Middle Level:* MLE 4100, 3150 and ELE 4880. WI

Ms. Eskew left the meeting at 3:35 p.m. following the vote on agenda item 12-72.

13. 12-73, ELE 4890, Culturally and Linguistically Diverse Students/English Language Learners: Instructional Methods. (New Course).

Dr. Russell and Dr. Carter presented the proposal and answered questions of the council.

Ms. Upton moved and Dr. Steinke seconded the motion to approve the proposal. The motion passed unanimously.

The proposal was approved, effective Summer 2013.

ELE 4890. Culturally and Linguistically Diverse Students/English Language Learners: Instructional Methods. (3-0-3) CLD/ELL: Instructional Methods. This course is designed to provide teacher candidates with the knowledge, skills and dispositions to effectively organize and implement instructional methods for students that are culturally and linguistically diverse (CLD) and/or English Language Learners (ELL). Teacher candidates will research and reflect on various methods and strategies to design instruction to meet the needs of students who are considered CLD/ELL and who may have varying levels of language proficiency. This course is restricted to teacher Education candidates who have successfully met the University Teacher Education requirements and department requirements and have met all the prerequisites. **Prerequisites:** *Early Childhood:* ELE 3281 and ELE 4775; or *Elementary Education:* ELE 3280 and ELE 3350 or permission of the Department Chair. These prerequisite courses may be taken concurrently with the course. University Teacher Education requirements apply and department requirements for enrollment must be met. WA

14. 12-74, MLE 4100, Assessing Student Learning: A Field-Based Experience. (New Course).

Dr. Russell and Dr. Carter presented the proposal and answered questions of the council.

Ms. Green moved and Dr. Rhoads seconded the motion to approve the proposal. The motion passed unanimously.

The proposal was approved, effective Fall 2013.

MLE 4100. Assessing Student Learning: A Field-Based Experience. (2-3-3) F, S. On Demand. Assessing Student Learning. This course emphasizes monitoring children's learning through data-driven assessment in order to meet the needs of diverse learners. Major topics will include effective classroom management and developing positive teaching dispositions in order to become a reflective practitioner. This course includes class meeting times and supervised field experiences (minimum 60 hours). This course is restricted to Elementary/Middle School Option, Special Education Majors, and Post Baccalaureate Teacher Certification who have met all pre-requisites. **Prerequisites:** *Elementary Education Middle School option majors:* ELE 3280, ELE 3340, ELE 3350, MLE 3110, MLE 4000, and MLE 4760. University Teacher Education requirements apply and department requirements for enrollment must be met. **Co-requisites:** MLE 3150, MLE 4280, ELE 4880 and ELE 3290. WA

VII. Pending:

1. 11-117, Review of Integration, Instructional Practices, and Effectiveness of EIU's Four University Learning Goals (Ongoing)
2. 11-132R, Course Proposal Format Form (Revised Form)
3. 12-54C R, Revisions to the catalog copy for the following sections of the Undergraduate Catalog: General Education, Academic Regulations, Course Information, and Honors College.
4. 12-65, HIC 2000G, Introduction to the Humanities: Interdisciplinary Problem-Solving. (New Course)
5. 12-66, EIU 4100G, Senior Seminar: Advanced Interdisciplinary Studies in Matters of Culture. (Revised Course)

VII. Meeting Adjournment:

The meeting adjourned at 3:45 p.m.

The October 18, 2012 has been cancelled. The next meeting date – to be announced.

–Minutes prepared by Ms. Janet Fopay, Recording Secretary

The current agenda and all CAA council minutes are available on the Web at <http://www.eiu.edu/~eiucaa/>. In addition, an electronic course library is available at <http://www.eiu.edu/~eiucaa/elibrary/>.

The CAA minutes, agendas, and summaries of CAA actions are distributed via a listserv, caa-list. To subscribe, go to the following web site: <http://lists.eiu.edu/mailman/listinfo/caa-list>. Locate the section “Subscribing to caa-list” and enter your email address and create a password. Next, click on the subscribe box. An email will be sent to you requesting confirmation. Once confirmation is received, your request will be held for approval by the list administrator. You will be notified of the administrator’s decision by email.

***** ANNOUNCEMENT OF NEXT MEETING *****
TO BE ANNOUNCED

Agenda:

Pending:

1. 11-117, Review of Integration, Instructional Practices, and Effectiveness of EIU's Four University Learning Goals (Ongoing)
2. 11-132, Course Proposal Format Form (Revised Form)
3. 12-54C R, Revisions to the catalog copy for the following sections of the Undergraduate Catalog: General Education, Academic Regulations, Course Information, and Honors College.
4. 12-65, HIC 2000G, Introduction to the Humanities: Interdisciplinary Problem-Solving. (New Course)
5. 12-66, EIU 4100G, Senior Seminar: Advanced Interdisciplinary Studies in Matters of Culture. (Revised Course)
6. 12-75, Resolution from CAA regarding the Department Application of Criteria (Proposed Resolution)

Approved Executive Actions:

CAH

Effective Spring 2013

1. Revise the prerequisites for JOU 3002.

JOU 3002 - Introduction to Multimedia Journalism.

(2-2-3) On Demand. An introduction to basic elements of multimedia journalistic reporting and storytelling, including audio, video, slideshows, and online journalism formats. Prerequisites and Notes: JOU 2101 and JOU 2950 **or permission of the instructor**. Prerequisites may not be taken concurrently. Course may not be repeated. Credits: 3

CEPS**Effective Fall 2013**

1. Renumber ELE 3000 to ELE 3100.

ELE 3000 3100 - Instructional Strategies for the Elementary Classroom.

(3-3-4) Topics include instructional strategies, models for classroom management and discipline, parent-school community involvement, and school law. Forty-five clock hours of field-based activities primarily in reading and language arts. Prerequisites and Notes: ELE 2000 and ELE 2320. Concurrent enrollment in ELE 3280 and ELE 3350, or permission of department chair. University Teacher Education requirements apply and department requirements for enrollment must be met, including an expectation of second semester Junior standing. Credits: 4

COS**Effective Spring 2013**

1. Add the writing-intensive designation to MAT 2270.

MAT 2270 - Technology in Mathematics.

(2-1-3) S. The focus of this course is how to use technology to investigate, model, simulate, and solve mathematical problems. Authentic and involved mathematical tasks and situations will be presented from a broad range of topics. Attention is given to the appropriate uses of technology and the potential drawbacks of technology in the secondary classroom. Laboratory experiences will include (but are not limited to) graphing calculators, Computer Algebra Systems, statistical tools, and dynamic geometry software. **WI** Prerequisites and Notes: MAT 2170. Credits: 3

COS**Effective Fall 2013**

1. Add language to the catalog description of the Clinical Laboratory Science major in order to provide clarification of the NAACLS accreditation and ASCP registry.

Clinical Laboratory Science (B.S.)

This cooperative degree program, administered by the Pre-Health Professions Advisor, leads to the Bachelor of Science degree. It is a four-year program including three years of college **work courses** followed by one year of work in an affiliated hospital. The degree requires 120 semester hours of credit including 90 semester hours at EIU (or a combination of transfer credits and credits earned at Eastern totaling 90 semester hours) and 32 semester hours credit for successful completion of a one-year program in clinical laboratory science at **an a National Accrediting Agency for Clinical Laboratory Science (NAACLS)** affiliated hospital. **Upon successful completion of the hospital work, the student becomes a candidate for a Bachelor of Science degree in Clinical Laboratory Science and is eligible to take the certifying examinations of the American Society of Clinical Pathologists (ASCP) for registry as a Medical Laboratory Scientist.** The clinical hours taken at the affiliated hospital will be treated as courses taken at EIU counting in residency hours and will be included in EIU grade point average. Since the clinical hours are treated as EIU residency hours, CLS majors are required to satisfy the standard 42 EIU residency hours, the 32 hour junior/senior year and 12 hour senior year residency hours despite being cooperative degree students. EIU cannot guarantee admission to any of its affiliated hospitals.

Pending Executive Actions:

None.

Attachment A**Mathematics and Computer Science (B.S.)****Major**

The Mathematics and Computer Science major comprises a required upper-division writing intensive course and the following:

- MAT 1441G - Calculus and Analytic Geometry I. Credits: 5
- MAT 2170 - Computer Science I. Credits: 4
- MAT 2345 - Elements of Discrete Mathematics. Credits: 3
- MAT 2442 - Calculus and Analytic Geometry II. Credits: 5
- MAT 2443 - Calculus and Analytic Geometry III. Credits: 4
- MAT 2550 - Introduction to Linear Algebra. Credits: 3
- MAT 2670 - Computer Science II. Credits: 4
- MAT 3570 - Numerical Analysis. Credits: 3
- MAT 3670 - Principles of Computer Systems. Credits: 3
- MAT 3701 - Probability and Statistics I. Credits: 3
- MAT 3702 - Probability and Statistics II. Credits: 3
- MAT 3770 - Combinatorial Computing. Credits: 3
- MAT 3870 - Data Structures. Credits: 3
- MAT 42751 - Internship in Mathematics and Computer Science I. Credits: 10 to 15 or MAT 42752
- MAT 4880 - Design and Analysis of Algorithms. Credits: 3
- MAT 4970 - Principles of Operating Systems. Credits: 3

6-8 Semester Hours of Electives Chosen From

- MAT 3501 - Differential Equations I. Credits: 3
- MAT 3502 - Differential Equations II. Credits: 3
- MAT 3530 - Abstract Algebra. Credits: 4
- **MAT 4170 – Programming for Mobile Devices. Credits 3**
- MAT 4370 - Topics in Computer Science. Credits: 3
- MAT 4750 - Linear Programming. Credits: 3
- **MAT 4873 – Introduction to Cryptography. Credits 3**
- MAT 4885 - Theory of Computation. Credits: 3
- PHY 3150 - Electronics. Credits: 4

Footnotes:

(Major GPA based on those courses listed above taken at EIU.)