November 21, 2008
ADM 204
2:00 – 5:00 pm

I. Roll

( ) Hilary Davies, Chair ( ) Cheryl Smith ( ) Deborah Mole
( ) Bettina Kipp Lavea ( ) Toni Croft ( ) Erik Hirschmann
( ) Suzanne Forster ( ) Robin Wahto ( ) Utpal Dutta
( ) Fred Barbee ( ) Kenrick Mock ( ) vacant (CAS)
( ) Catherine Sullivan ( ) Marion Yapuncich ( ) Mari Ippolito (FS At Large, CAS)
( ) Hilary Seitz ( ) Jesse Mickelson

II. Approval of the Agenda (pg. 1-2)

III. Approval of Meeting Summary for November 14, 2008 (pg. 3-5)

IV. Administrative Report

A. Vice Provost Tom Miller

B. Registrar John Allred

V. Chair’s Report

A. UAB Chair- Hilary Davies
   Discussion of GER list of courses with approval dates

B. GER Chair- Suzanne Forster

VII. Program/Course Action Request – Second Reading

A. CAS
Chg ANTH A101 Introduction to Anthropology (3 cr) (3+0)
Chg ANTH A200 Natives of Alaska (3 cr) (3+0)
Chg ANTH A202 Cultural Anthropology (3 cr) (3+0)
Chg ANTH A250 The Rise of Civilization (3 cr) (3+0)

Revisions were received late

B. CHSW
Chg JUST A110 Introduction to Justice (3 cr) (3+0)

No revisions received

Add JUST A460 Justice in Crisis (3 cr) (3+0) (pg. 6-14)

C. SOE
Chg GEO A460 Geomatics Design Project (3 cr) (2+2)

No revision received

Add CE A423 Traffic Engineering (3 cr) (2+2) (stacked with CE A623) (pg. 15-24)
Add CE A424 Pavement Design (3 cr) (2+2) (stacked with CE A624) (pg. 25-36)
VIII. Program/Course Action Request – First Reading

Chg CE A425 Highway Engineering (3 cr) (2+3) (stacked with CE A625) (pg. 37-48)

IX. Old Business

X. New Business
A. Curriculum Coordination (pg. 54-55)

XI. Informational Items and Adjournment
A. Curriculum Log
B. Curriculum Handbook
C. Catalog Copy
Undergraduate Academic Board
Summary

November 14, 2008

ADM 204
2:00 – 5:00 pm

I. Roll

(x) Hilary Davies, Chair (x) Cheryl Smith (x) Deborah Mole
( ) Bettina Kipp Lavea (x) Toni Croft (x) Erik Hirschmann
(x) Suzanne Forster (x) Robin Wahto (x) Utpal Dutta
(x) Fred Barbee (x) Kenrick Mock ( ) vacant (CAS)
(x) Catherine Sullivan (x) Marion Yapuncich (x) Mari Ippolito (FS At Large, CAS)
(x) Hilary Seitz(Heather Nash) (x) Jesse Mickelson

II. Approval of the Agenda (pg. 1-3)
Approved

III. Approval of Meeting Summary for October 31, 2008 (pg. 4-7)
Approved

IV. Administrative Report

A. Vice Provost Tom Miller

B. Registrar John Allred

   Program decision for Civil Engineering

   MOTION to approve this process as discussed below.
   Items that need to be brought to the board:
   - Memo listing the Engineering courses that will require prerequisites of C or better. This memo will be approved by UAB and Faculty Senate. This memo should make it clear that these courses already have the prerequisites listed in the program catalog copy
   - CAR with hand written updated prerequisites
   - Updated front page of CCG

V. Chair’s Report

A. UAB Chair- Hilary Davies

   UAB meeting dates for December and January. UAB will meet on December 12 and January 9 if there is curriculum to review.

B. GER Chair- Suzanne Forster

   Capstone assessment:
   Have a draft of all three pieces faculty survey/ student survey
   CAFE Event on December 5th to introduce Capstone Assessment Plan to faculty

VI. ILO Task Force (documents emailed)

   Changes from GAB
   - D and E changed possess to demonstrate
   - E degree or major discipline (flipped wording)

   MOTION (Cheryl Smith): The UAB endorses these five Institutional Learning Outcomes. They will go forward to the Faculty Senate and then to the steering committee with the revisions suggested.
VII. Program/Course Action Request – Second Reading

A. CAS
Chg PS A101  Introduction to American Government (3 cr) (3+0) (pg. 8-11)
Chg PS A102  Introduction to Political Science (3 cr) (3+0) (pg. 12-15)
Chg PS A311  Comparative Politics (3 cr) (3+0) (pg. 16-19)
Approved

Add Bachelor of Arts in Environment & Society (pg. 20)
Add Bachelor of Science in Environment & Society (pg. 21)
Chg Minor, Environmental Studies (pg. 22)
Add Minor, Geography (pg. 23-29)
Approved

Add ENVI A470  Environmental Planning and Problem Solving (4 cr) (2+6) (pg. 30-35)
Approved

Del ENVI A202  Earth as an Ecosystem: Introduction to Environmental Science (3 cr) (3+0) (pg. 36)
Del ENVI A492  Proseminar in Environmental Studies (3 cr) (3+0) (pg. 37)
Approved

Del GEOG A205  Elements of Physical Geography (3 cr) (3+0) (pg. 38)
Del GEOG A205L  Elements of Physical Geography Laboratory (3 cr) (0+3) (pg. 39)
1 opposed
Approved

Chg ANTH A101  Introduction to Anthropology (3 cr) (3+0) (pg. 40-44)
Chg ANTH A200  Natives of Alaska (3 cr) (3+0) (pg. 45-49)
Chg ANTH A202  Cultural Anthropology (3 cr) (3+0) (pg. 50-53)
Chg ANTH A250  The Rise of Civilization (3 cr) (3+0) (pg. 54-58)
Tabled all ANTH courses

B. CHSW
Chg NURS A101  Introduction to Nursing (2 cr) (2+0) (pg. 59-62)
Chg NURS A125  Adult Nursing I (3 cr) (3+0) (pg. 63-68)
Chg NURS A125L  Adult Nursing I Lab (4 cr) (0+12) (pg. 69-74)
Chg NURS A250  Psychiatric Nursing (3 cr) (2+2) (pg. 75-79)
Chg NURS A250L  Psychiatric Nursing Lab (1 cr) (0+3) (pg. 80-83)
Approved

Chg NS A305  Health Assessment of Individuals (2 cr) (2+0) (pg. 84-88)
Chg NS A305L  Health Assessment of Individuals Laboratory (1 cr) (0+3) (pg. 89-92)
Chg NS A313  Health Disruptions I (3 cr) (3+0) (pg. 93-98)
Chg NS A313L  Health Disruptions I Laboratory (3 cr) (3+0) (pg. 99-103)
Chg NS A314  Health I for Registered Nurses (2 cr) (2+0) (pg. 104-110)
Chg NS A314L  Health I for Registered Nurses Laboratory (2 cr) (0+6) (pg. 111-116)
Chg NS A315  Health I: Nursing Therapeutics (3 cr) (2+2) (pg. 117-124)
Chg NS A315L  Health I: Nursing Therapeutics Laboratory (3 cr) (0+9) (pg. 125-131)
Chg NS A417  Management in Nursing (3 cr) (3+0) (pg. 132-136)
Chg NS A424  Issues in Women’s Health (3 cr) (3+0) (pg. 137-142)
Chg NS A428  Nursing Clients with Chemical Dependency (3 cr) (3+0) (pg. 143-147)
Chg NS A429  Perioperative Nursing (3 cr) (2+3) (pg. 148-152)
Chg NS A430  Rural Health Care (3 cr) (3+0) (pg. 153-156)
Chg NS A431 Human Sexuality in Health and Illness (3 cr) (3+0) (pg. 157-160)
Del NS A438 Managed Care: Issues and Practice (3 cr) (3+0) (pg. 161)

Approved all NS courses

Chg SWK A106 Introduction to Social Welfare (3 cr) (3+0) (cross listed w/ HUMS A106) (pg. 162-168)

Approved

Chg HUMS A106 Introduction to Social Welfare (3 cr) (3+0) (cross listed w/ SWK A106) (pg. 169-175)

Approved

Chg JUST A110 Introduction to Justice (3 cr) (3+0) (pg. 176-182)
Add JUST A460 Justice in Crisis (3 cr) (3+0) (pg. 183-190)
Tabled all Justice courses

C. SOE
Chg GEO A460 Geomatics Design Project (3 cr) (2+2) (pg. 191-195)
Tabled at GERC

Add ME A438 Design of Mechanical Engineering Systems (3 cr) (3+0) (pg. 196-202)
Add EE A438 Design of Electrical Engineering Systems (3 cr) (3+0) (pg. 203-209)
Add CSE A438 Design of Computer Engineering Systems (3 cr) (3+0) (pg. 210-216)
Need CAR to delete ENGR A438 and updated program catalog copy

Approved

VIII. Program/Course Action Request – First Reading
Add CE A423 Traffic Engineering (3 cr) (2+2) (stacked with CE A623) (pg. 217-226)
Accepted

Add CE A424 Pavement Design (3 cr) (2+2) (stacked with CE A624) (pg. 227-238)
Accepted

Chg CE A425 Highway Engineering (3 cr) (2+3) (stacked with CE A625) (pg. 239-250)
Accepted

IX. Old Business

X. New Business

XI. Informational Items and Adjournment
A. Curriculum Log
B. Curriculum Handbook
C. Catalog Copy
Curriculum Action Request
University of Alaska Anchorage
Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

1a. School or College
HW CHSW

1b. Division
AJUS Division of Justice

1c. Department
Justice Center

2. Course Prefix
JUST

3. Course Number
A460

4. Previous Course Prefix & Number
n/a

5a. Credits/CEU
3

5b. Contact Hours
(Lecture + Lab)
(3+0)

6. Complete Course/Program Title
Justice in Crisis
Abbreviated Title for Transcript (30 character)

7. Type of Course
☐ Academic
☐ Non-credit
☐ CEU
☐ Professional Development

8. Type of Action
☒ Add
☐ Change
☐ Delete

9. Repeat Status No

# of Repeats

Max Credits

10. Grading Basis
☒ A-F
☐ P/NP
☐ NG

11. Implementation Date
From: Summer/2009
To: 12/9999

12. ☐ Cross Listed with
N/A

Stacked with
N/A

Cross-Listed Coordination Signature

13. List any programs or college requirements that require this course
n/a

14. Coordinate with Affected Units: UAA Faculty Listserv and UAB Department, School, or College
Initiator Signature
Date

15. ☒ General Education Requirement
☐ Oral Communication
☐ Written Communication
☐ Quantitative Skills
☐ Humanities
☐ Fine Arts
☐ Social Sciences
☐ Natural Sciences
☒ Integrative Capstone

16. Course Description
Critically examines various perspectives on justice and the ability of a society to maintain the ideal of justice. Compares conditions in different countries and investigates different social and historical conditions when justice was challenged and analyzes the influence of culture, race/ethnicity and socioeconomic inequality on the operation of the American Justice System.

17a. Course Prerequisite(s) (list prefix and number)
JUST A200, A201, A221, A250, A251, A330, A360

17b. Test Score(s)
N/A

17c. Co-requisite(s) (concurrent enrollment required)
N/A

17d. Other Restriction(s)
☒ College
☒ Major
☒ Class
☐ Level

17e. Registration Restriction(s) (non-codable)
Completion of all GER Tier 1 (Basic College-Level Skills) Courses, Justice Major and Senior Standing

18. ☒ Mark if course has fees None

19. Justification for Action
Adds Capstone course to Justice BA as an elective and fulfills Integrative Capstone requirement
I. **Date of Initiation**: October 1, 2008

II. **Course Information**

A. College: College of Health and Social Welfare  
B. Course Subject/Number: JUST A460  
C. Course Title: Justice in Crisis  
D. Credit Hours: 3 Credits  
E. Contact Hours: 3+0 Contact Time  
F. Grading Basis: A-F  
G. Implementation Date: Summer/2009  
H. Course Description: Critically examines various perspectives on justice and the ability of a society to maintain the ideal of justice. Compares conditions in different countries and investigates different social and historical conditions when justice was challenged and analyzes the influence of culture, race/ethnicity and socioeconomic inequality on the operation of the American Justice System.

I. Course Prerequisites: JUST A200, A201, A221, A250, A251, A330, A360.  
J. Test Scores: N/A  
K. Co-requisites: None  
L. Other Restrictions: Major; class  
M. Registration Restrictions: Completion of all GER Tier 1 (Basic College-Level Skills) Courses, Justice Major and Senior Standing  
N. Course Fee: None

III. **Instructional Goals and Student Outcomes**

<table>
<thead>
<tr>
<th>Instructional Goals – The instructor will:</th>
<th>Student Outcomes – The students will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present and critically review different perspectives on justice</td>
<td>Demonstrate a critical understanding of different perspectives on justice</td>
</tr>
<tr>
<td>Direct and assist students to develop an appreciation and understanding of the operation of systems of justice</td>
<td>Critically evaluate different systems of justice</td>
</tr>
</tbody>
</table>
### Instructional Goals – The instructor will:

<table>
<thead>
<tr>
<th>Instructional Goals – The instructor will:</th>
<th>Student Outcomes – The students will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examine the strengths and weaknesses of different systems of justice</td>
<td>Analyze the qualities of different systems of justice</td>
</tr>
<tr>
<td>Review and critique different strategies for achieving justice</td>
<td>Evaluate different strategies for achieving justice</td>
</tr>
<tr>
<td>Consider the role of historical events, information and social science literature on the operation of justice</td>
<td>Assess the role of historical events, information and social science literature on justice systems</td>
</tr>
<tr>
<td>Assess the relationship between the operation of contemporary criminal law and justice</td>
<td>Appraise the operation of contemporary criminal law and its ability to achieve justice</td>
</tr>
<tr>
<td>Critically examine and critique the operation of the contemporary criminal justice process</td>
<td>Evaluate the influence of social and economic forces on the criminal justice process</td>
</tr>
<tr>
<td>Review and critique the influence of socioeconomic inequality and racial/ethnic bias on the criminal justice system</td>
<td>Appreciate and assess the enduring influence of racial/ethnic bias and socioeconomic inequality on the operation of the criminal justice system</td>
</tr>
<tr>
<td>Review and critique differing sources of academic literature, research reports, and statistical information and the impact of such material on justice policy</td>
<td>Assess and evaluate appropriateness and quality of academic literature, research reports, and statistical information and recognize effect of such material on justice policy development</td>
</tr>
</tbody>
</table>

### IV. Guidelines for Evaluation:

Assessment methods are selected at the discretion of the course instructor who may use some or all for any particular outcome.

Student performance will be evaluated based upon:

<table>
<thead>
<tr>
<th>Student Outcomes – The students will:</th>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate a critical understanding of different perspectives on justice</td>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
</tr>
<tr>
<td>Critically evaluate different systems of justice</td>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
</tr>
<tr>
<td>Demonstrate the ability to analyze the qualities of different systems of justice</td>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
</tr>
<tr>
<td>Evaluate different strategies for achieving justice</td>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
</tr>
</tbody>
</table>
### Student Outcomes – The students will:

<table>
<thead>
<tr>
<th>Comprehend the role of historical events and information on justice systems</th>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critically analyze the operation of contemporary criminal law and its ability to achieve justice</th>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluate the influence of social and economic forces on the criminal justice process</th>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
<td></td>
</tr>
</tbody>
</table>

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<tr>
<th>Appreciate and assess the enduring influence of racial/ethnic bias and socioeconomic inequality on the operation of the criminal justice system</th>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
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<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
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<tr>
<td>Objective and essay examinations; oral presentations; research paper; reading study guide questions; and participation and attendance</td>
<td></td>
</tr>
</tbody>
</table>

### V. Course Level Justification:

This course is designed to fulfill the Integrative Capstone course requirement. Administratively this requires senior standing and completion of all required courses for the Justice BA degree prior to enrolling in the course. The structure and substantive content of the course requires students to generate artifacts demonstrating complex knowledge integration, effective communication, critical thinking, and information literacy.

### VI. Integrative Capstone Assessment:

**Knowledge Integration:** The course will require students to integrate ideas on justice from sociology, philosophy, history, law, criminology, criminal justice and relevant GER foundation courses. Students are expected to understand the development and operation of different systems of justice and compare their strengths and weaknesses. The course will require students to evaluate research analyzing the operation of the criminal justice system and its ability to achieve justice.

**Effective Communication:** Students are expected to complete a variety of written assignments that include weekly study questions and a research paper and oral presentations of selected study guide questions and the completed research paper. The different assignments will provide students the opportunity to demonstrate a range of written and oral communication skills.
Critical Thinking: This course will require students to integrate and critically evaluate different perspectives on the idea of justice and the operation of justice systems. The course will require students to develop arguments from the readings based on their critical thinking skills. The written assignments and oral presentations will be used to assess student abilities to accurately understand material, clearly define concepts and issues, and critically evaluate arguments and present reasoned solutions to problems.

Information Literacy: This course will require students to understand how information and misinformation can be used to form public policy in justice and legal systems. Students will critically evaluate differing sources of academic literature, research reports, and statistical information; will recognize the appropriateness and quality of each source; and will understand how information shapes policy. Almost all instructional goals and student outcomes will include a focus on information literacy. Students will demonstrate their progress and success in information literacy through examinations, assignments, and presentations that will require the analysis, critique, and usage of information from various information sources.

VII. Course Outline:

A. What is Justice?
   1. Religion as Justice
   2. Justice and Philosophy

B. Justice and the State
   1. The Social Contract
   2. Liberty, Equality and Justice
   3. Criminal Justice

C. Social Justice
   1. Human Rights
   2. Justice and Economics
   3. Environmental Justice

D. Formal Systems of Justice
   1. Common Law Systems
      a. History
      b. Characteristics
      c. Modern Structure of the Legal System
   2. Civil Law Systems
      a. History
      b. Characteristics
      c. Modern Structure of the Legal System
   3. Islamic Law Systems
      a. Sources of Islamic Law
      b. Crime and Punishment
      c. Criminal Procedure
   4. Justice American Style
a. Efficiency and Inefficiency and Justice  
b. Criminal Justice Process  
c. Distinguish Justice and Crime  
d. Disciplinary Views of Justice Studies  
e. Theoretical Approaches to Law and Criminal Justice  
f. Critical Issues

E. Strategies for Achieving Justice  
1. Individual Strategies  
2. Organizational Strategies  
3. Global Strategies

F. Investigations of Justice in Crisis - History  
1. Hitler’s Justice: Courts of the Third Reich  
a. Role of Judges  
b. Enforcement of Conformity  
2. General Legal System (1933 – 1945)  
a. Treason and Treachery: Political Opposition and the Courts  
b. Creation of the Concentration Camps  
c. Arbitrary Decisions in Everyday Life  
d. Resistance from the Bench  
3. Collapse and Reconstruction of the Legal System  
a. Restoration  
b. Coming to Terms with the Past  
c. Injustice Confirmed  
d. An Attempt at an Explanation

G. Investigations of Justice in Crisis – The Death Penalty  
1. When Justice Goes Wrong (Death Penalty and Wrongful Convictions)  
a. Actual Innocence  
b. DNA  
2. Recent Empirical Research on the Death Penalty  
3. Recent Debates on Punishment Rationales for the Death Penalty  
4. Characteristics and Common Elements of Wrongful Convictions  
a. Seeing Things and False Identification  
b. False Confessions  
c. Faulty Science  
d. Lawyers  
5. Lessons  

H. Investigations of Justice in Crisis – Race, Poverty, Drugs and Corruption  
1. Tulia: Race, Cocaine, and Corruption in a Small Texas Town  
a. Police and Community  
b. Race and Legal Representation  
2. Empirical Research on Police Corruption  
3. Undercover Police Investigations  
a. Discretion and Race  
b. Race and Power
c. Selective Enforcement
4. Prosecutorial Discretion: Power and Privilege
5. Social and Political Theories of Plea Bargaining
6. The Power of Plea Bargaining
7. Prosecutorial Misconduct: The Abuse of Power and Discretion
8. Prosecutorial Ethics
9. Court Process and Issues of Race
   a. Evidence and Convictions
   b. Juries and Beyond a Reasonable Doubt
   c. Media Attention
10. Questions and Doubt
   a. Legal Review
   b. Appeals
11. Negotiations
   a. Release and Pardons
   b. Prosecution of Police Corruption
   c. Prosecutorial Misconduct
   d. Prosecutorial Accountability
12. Race, Poverty and the Justice Process

VIII. Suggested Texts:


IX. Bibliography:

Manuscripts and Edited Volumes:


**Journals:**

*American Sociological Review*
1a. School or College
EN SOENGR

1b. Division

1c. Department
CIVIL ENGINEERING

2. Course Prefix
CE

3. Course Number
A423

4. Previous Course Prefix & Number

5a. Credits/CEU
3.0 CR

5b. Contact Hours
(Lecture + Lab)
(2+2)

6. Complete Course/Program Title
Traffic Engineering

Abbreviated Title for Transcript (30 character)

7. Type of Course

8. Type of Action

9. Repeat Status No

10. Grading Basis

11. Implementation Date
    From: Fall/2009
    To: 99/9999

12. Cross Listed with

13. List any programs or college requirements that require this course
    Technical elective for Bachelor of Science of Science in Civil Engineering.

14. Coordinate with Affected Units:
    Faculty list serve. Only the Department of Civil Engineering is affected.

15. General Education Requirement

16. Course Description
    Traffic engineering studies and analysis, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

17a. Course Prerequisite(s) (list prefix and number)
    CE A402 with a grade C or better.

17b. Test Score(s)

17c. Co-requisite(s) (concurrent enrollment required)

17d. Other Restriction(s)

17e. Registration Restriction(s) (non-codable)

18. Mark if course has fees

19. Justification for Action
    Elective course for Bachelor of Science in Civil Engineering, providing specialized practical training in transportation engineering.
Department: Civil Engineering

Course Prefix, Number, and Title: CE A423 Traffic Engineering

I. Course description
Traffic engineering studies and analysis, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

II. Course Design

A. Fundamental intent: Designed as a technical elective for undergraduate students majoring in Civil Engineering. Course to be stacked with CE A623 Traffic Engineering.

B. Number of Semester Credits: Three (3).

C. Course Schedule: Standard fifteen (15) week semester.

D. Lectures Hours/week: Two (2).

E. Laboratory Hours/week: Two (2).

F. Total time of work expected outside of class: Six (6) hours per week.

G. Programs that require this course: Technical elective for Bachelor of Science in Civil Engineering.

H. Grading: A – F.

I. Coordination with affected unites: Faculty list serve. Only the Department of Civil Engineering is affected.

J. Justification for Action: Elective course for the Bachelor of Science in Civil Engineering, providing specialized practical training in transportation engineering.

K. Prerequisite: CE A402 with a grade of C or better.

L. Registration Restrictions: Senior standing.
III. Course level justification

A. The course will involve application of engineering and scientific knowledge and skills typical of undergraduate engineering students.

B. The primary context of the course will be discussion and interaction among professional peers on advanced topics, with the basic assumption that students are accustomed to this level of interaction.

C. Lectures, multimedia presentations, and required reading will include advanced scientific and engineering topics that require for correct interpretation a background in math and science equivalent to that of Bachelors degree programs in engineering.

D. Students in the course analyze measured data and evaluate analytical methods to solve problems typical of advanced engineering and applied science research and practice.

E. Significant responsibility for independent critical thinking, efficient learning habits, and interpretation of technical information will fall on the student, at a level commonly associated with undergraduate education.

IV. Course Outline

A. Introduction to traffic engineering and its scope
   1. Components of the systems and their characteristics
   2. Roadways and their geometric characteristics
   3. Introduction to traffic control devices
   4. Intelligent transportation systems

B. Traffic engineering studies and analysis
   1. Statistical applications in traffic engineering
   2. Volume studies and characteristics
   3. Speed, travel, time and delay studies
   4. Parking studies and programs

C. Traffic control
   1. Traffic control for freeways
   2. Traffic control for rural highways

D. Intersection control and design
   1. Introduction to intersection control
   2. Basic principles of intersection signalization
   3. Fundamentals of signal design and timing
   4. Elements of intersection design
   5. Actuated signal control and detection
   6. Analysis of signalized intersections
   7. Applications of signalized intersection analysis

E. Capacity level and level of service analysis
   1. Freeways and multilane rural highways
   2. Signalized intersections

V. Instructional Goals and Student Outcomes

A. Instructional Goals. Instructor will introduce the:
   1. basic skills in the traffic engineering design and analysis of highway facilities,
   2. skills for conducting traffic engineering data collection, and studies,
   3. basics in traffic design and control,
   4. design a signalized intersection,
   5. basics in capacity and Level of Service analysis,
   6. analysis and evaluation of the capacity of a signalized intersection,
   7. typical engineering documentation and interaction with others in a professional manner,
8. preservation, sharing, and analyzing information in traffic engineering,
9. teamwork skills necessary to achieve goals efficiently and professionally,
10. wider perspective and diversity of the engineering profession when dealing with the social,
economic, and environmental aspects in traffic engineering.

B. **Student Outcomes.** Students who successfully complete this course will be able to:
1. visualize the traffic engineering in perspective to highway engineering,
2. integrate and interact with the prospective transportation professionals and agencies,
3. understand the importance of the interaction of the different components of traffic
   engineering components,
4. deliver a project report that meets the objectives of the traffic design aspect under
   consideration,
5. realize the dimensions of the components of traffic systems,
6. understand the basics in the design and analysis of traffic engineering systems,
7. relate to other courses in the field of transportation engineering to enhance his/her
   knowledge and skills in the design, operation, and management of highway facilities.

VI. **Course Activities**
A. Class meetings consist of lectures, multimedia presentations, discussions, and periodic
   examinations.
B. Students are assigned required reading and homework problems to analyze measured data and
   evaluate analytical solution methods.
C. Students will complete a design project in the field of Traffic Engineering within course time
   frame.
D. Students are required to perform experiments in the field, collect data, and analyze data in the
   field of Traffic Engineering.

VII. **Course Evaluation.** Methods of evaluation may include but are not limited to:

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visualize the traffic engineering in perspective to highway engineering.</td>
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<tr>
<td>Integrate and interact with the prospective transportation professionals and agencies.</td>
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<td>Understand the importance of the interaction of the different components of traffic engineering components.</td>
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</tr>
<tr>
<td>Be able to deliver a project report that meets the objectives of the traffic design aspect under consideration.</td>
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</tr>
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<td>Performance in presentation of a design project.</td>
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<td>Have the ability to focus on further courses in the field of transportation engineering to enhance his/her knowledge and skills in the design, operation, and management of highway facilities.</td>
<td>Performance in preparing, presenting, and writing a design project.</td>
</tr>
</tbody>
</table>
VIII. Suggested Text:

IX. Alternative texts and references:


X. Websites:

American Association of State and Highway transportation Officials (AASHTO)  www.transportation.org/  
American Public Transit Association  www.apta.com  
Transportation Research Board  www.trb.org  
U.S. Bureau of Transportation Statistics  www.bts.gov  
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# Curriculum Action Request

## University of Alaska Anchorage

Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

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<thead>
<tr>
<th>1a. School or College</th>
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<tr>
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Abbreviated Title for Transcript (30 character):

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<th>10. Grading Basis</th>
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<tr>
<td>To: 99 /9999</td>
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<th>12. Cross Listed with</th>
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<tbody>
<tr>
<td>Stacked</td>
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<tr>
<td>with CE A423</td>
</tr>
</tbody>
</table>

### List any programs or college requirements that require this course

Technical elective for Masters of Science of Science in Civil Engineering.

### Coordinate with Affected Units: Faculty list serve. Only the Department of Civil Engineering is affected.

### Initiator Signature Date

<table>
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<th>15. General Education Requirement</th>
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<tbody>
<tr>
<td>Oral Communication</td>
</tr>
<tr>
<td>Fine Arts</td>
</tr>
</tbody>
</table>

### Course Description

Traffic engineering studies and analysis, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

### Course Prerequisite(s) (list prefix and number)

| 17a. | CE A402 a grade of C or better |

### Test Score(s)

### Co-requisite(s) (concurrent enrollment required)

### Registration Restriction(s) (non-codable)

### Mark if course has fees

### Justification for Action

Elective course for Master of Science in Civil Engineering, providing specialized practical training in transportation engineering.

Note: Course to be stacked with CE A423 Traffic Engineering.
Department: Civil Engineering

Course Prefix, Number, and Title: CE A623 Traffic Engineering

I. Course description
Traffic engineering studies and analysis, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

II. Course Design

A. Fundamental intent: Designed as a technical elective for graduate students majoring in Civil Engineering.
Note: Course to be stacked with CE A423 Traffic Engineering.

B. Number of Semester Credits: Three (3).

C. Course Schedule: Standard fifteen (15) week semester.

D. Lectures Hours/week: Two (2).

E. Laboratory Hours/week: Two (2).

F. Total time of work expected outside of class: Eight (8) hours per week.

G. Programs that require this course: Technical elective for Masters of Science in Civil Engineering.

H. Grading: A – F.

I. Coordination with affected units: Faculty list serve. Only the Department of Civil Engineering is affected.

J. Justification for Action: Elective course for the Masters of Science in Civil Engineering, providing specialized practical training in transportation engineering.

K. Prerequisite: CE A402.

L. Registration Restrictions:
Course level justification

A. The course will involve application of engineering and scientific knowledge and skills typical of graduate engineering students.
B. The primary context of the course will be discussion and interaction among professional peers on advanced topics, with the basic assumption that students are accustomed to this level of interaction.
C. Lectures, multimedia presentations, and required reading will include advanced scientific and engineering topics that require for correct interpretation a background in math and science equivalent to that of master’s degree programs in engineering.
D. Students in the course analyze measured data and evaluate analytical methods to solve problems typical of advanced engineering and applied science research and practice.
E. Significant responsibility for independent critical thinking, efficient learning habits, and interpretation of technical information will fall on the student, at a level commonly associated with graduate education.

III. Course Outline

A. Introduction to traffic engineering and its scope
   1. Components of the systems and their characteristics
   2. Roadways and their geometric characteristics
   3. Introduction to traffic control devices
   4. Intelligent transportation systems
B. Traffic engineering studies and analysis
   1. Statistical applications in traffic engineering
   2. Volume studies and characteristics
   3. Speed, travel, time and delay studies
   4. Parking studies and programs
C. Traffic control
   1. Traffic control for freeways
   2. Traffic control for rural highways
D. Intersection control and design
   1. Introduction to intersection control
   2. Basic principles of intersection signalization
   3. Fundamentals of signal design and timing
   4. Elements of intersection design
   5. Actuated signal control and detection
   6. Analysis of signalized intersections
   7. Applications of signalized intersection analysis
E. Capacity level and level of service analysis
   1. Freeways and multilane rural highways
   2. Signalized intersections
F. Research application in the field of traffic engineering.

IV. Instructional Goals and Student Outcomes

A. Instructional Goals. Instructor will introduce the:
   1. basic skills in the traffic engineering design and analysis of highway facilities,
   2. skills for conducting traffic engineering data collection, and studies,
   3. basics in traffic design and control,
   4. design of a signalized intersection,
   5. basics in capacity and Level of Service analysis,
   6. analysis and evaluation of the capacity of a signalized intersection,
   7. the typical engineering documentation and interaction with others in a professional manner,
8. preservation, sharing, and analyzing information in traffic engineering,
9. teamwork skills necessary to achieve goals efficiently and professionally,
10. wider perspective and diversity of the engineering profession when dealing with the social, economic, and environmental aspects in traffic engineering.

B. Student Outcomes. Students who successfully complete this course will be able to:
1. visualize the traffic engineering in perspective to highway engineering,
2. integrate and interact with the prospective transportation professionals and agencies,
3. understand the importance of the interaction of the different components of traffic engineering components,
4. deliver a project report that meets the objectives of the traffic design aspect under consideration,
5. realize the dimensions of the components of traffic systems,
6. understand the basics in the design and analysis of traffic engineering systems,
7. relate to other courses in the field of transportation engineering to enhance his/her knowledge and skills in the design, operation, and management of highway facilities.

V. Course Activities
A. Class meetings consist of lectures, multimedia presentations, discussions, and periodic examinations.
B. Students are assigned required reading and homework problems to analyze measured data and evaluate analytical solution methods.
C. Students will complete a scientific paper and design project in the field of Traffic Engineering within the course time frame.
D. Students are required to perform experiments in the field, collect data, and analyze data in the field of Traffic Engineering.

VI. Course Evaluation. Methods of evaluation may include but are not limited to:

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<td>Performance in the exam, quizzes, and homework assignments.</td>
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<tr>
<td>Integrate and interact with the prospective transportation professionals and agencies.</td>
<td>Performance in presentation of scientific paper and in a design project.</td>
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<td>Understand the importance of the interaction of the different components of traffic engineering components.</td>
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<tr>
<td>Realize the diminishings’ of the components of traffic systems.</td>
<td>Performance in the exam, quizzes, field projects, and homework assignments.</td>
</tr>
<tr>
<td>Be able to understand the basics in the design and analysis of traffic engineering systems.</td>
<td>Performance in presentation of scientific paper and in a design project.</td>
</tr>
<tr>
<td>Have the ability to focus on further courses in the field of transportation engineering to enhance his/her knowledge and skills in the design, operation, and management of highway facilities.</td>
<td>Performance in preparing, presenting, and writing a design project and scientific paper.</td>
</tr>
</tbody>
</table>
VII. **Suggested Text:**

VIII. **Alternative texts and references:**


IX. **Websites:**
American Association of State and Highway Transportation Officials (AASHTO) [www.transportation.org/](http://www.transportation.org/)

American Public Transit Association [www.apta.com](http://www.apta.com)

Transportation Research Board [www.trb.org](http://www.trb.org)

U.S. Bureau of Transportation Statistics [www.bts.gov](http://www.bts.gov)

Automotive Technology [www.automotive-technology.com](http://www.automotive-technology.com)

Institute of Transportation Engineers [www.ite.org](http://www.ite.org)

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EN SOENGR

### 1b. Division

### 1c. Department
CIVIL ENGINEERING

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<tr>
<td>CE</td>
<td>A424</td>
<td></td>
<td>3.0 CR</td>
<td>(2+2)</td>
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</table>

### 6. Complete Course/Program Title
Pavement Design

Abbreviated Title for Transcript (30 character)

### 7. Type of Course
- [ ] Academic
- [ ] Non-credit
- [ ] CEU
- [ ] Professional Development

### 8. Type of Action
- [x] Add
- [ ] Change
- [ ] Delete

### 9. Repeat Status
- [ ] No
- [ ] Yes
- # of Repeats: 0
- Max Credits

### 10. Grading Basis
- [x] A-F
- [ ] P/NP
- [ ] NG

### 11. Implementation Date
- From: Fall/2009
- To: 99/9999

### 12. Cross Listed with
- [x] Stacked
- CE A625

### 13. List any programs or college requirements that require this course
Technical elective for Bachelor of Science in Civil Engineering.

### 14. Coordinate with Affected Units
Faculty list serve. Only the Department of Civil Engineering is affected.

### 15. General Education Requirement
- [ ] Oral Communication
- [ ] Written Communication
- [ ] Quantitative Skills
- [ ] Humanities
- [ ] Fine Arts
- [ ] Social Sciences
- [ ] Natural Sciences
- [ ] Integrative Capstone

### 16. Course Description
Analysis and design of highway and airport pavements, principles of theoretical and practical approaches for the design of flexible and rigid pavement structures. Methods for asphalt concrete mixture design and performance measures.

### 17a. Course Prerequisite(s)
CE A402 with a grade of C or better.

### 17b. Test Score(s)

### 17c. Co-requisite(s)
Concurrent enrollment required.

### 17d. Other Restriction(s)
- [ ] College
- [ ] Major
- [ ] Class
- [ ] Level

### 17e. Registration Restriction(s)
Non-codable

### 18. Mark if course has fees

### 19. Justification for Action
Elective course for Bachelor in Science in Civil Engineering, providing specialized practical training in transportation engineering.
Department: Civil Engineering

Course Prefix, Number, and Title: CE A424 Pavement Design

I. Course description
Analysis and design of highway and airport pavements, principles of theoretical and practical approaches for the design of flexible and rigid pavement structures. Methods for asphalt concrete mixture design and performance measures.

II. Course Design

A. Fundamental intent: Designed as a technical elective for undergraduate students majoring in Civil Engineering.

B. Number of Semester Credits: Three (3).

C. Course Schedule: Standard fifteen (15) week semester.

D. Lectures Hours/week: Two (2).

E. Laboratory Hours/week: Two (2).

F. Total time of work expected outside of class: Six (6) hours per week.

G. Programs that require this course: Technical elective for Bachelor of Science in Civil Engineering.

H. Grading: A – F.

I. Coordination with affected units: Faculty list serve. Only the Department of Civil Engineering is affected.

J. Justification for Action: Elective course for the Bachelor in Science in Civil Engineering, providing specialized practical training in transportation engineering.

K. Prerequisite: CE A402 with grade of C or better.

L. Registration Restrictions: Senior standing.
III. Course level justification

A. The course will involve application of engineering and scientific knowledge and skills typical of undergraduate engineering students.
B. The primary context of the course will be discussion and interaction among professional peers on advanced topics, with the basic assumption that students are accustomed to this level of interaction.
C. Lectures, multimedia presentations, and required reading will include advanced scientific and engineering topics that require for correct interpretation a background in math and science equivalent to that of bachelor degree programs in engineering.
D. Students in the course analyze measured data and evaluate analytical methods to solve problems typical of advanced engineering practice.
E. Significant responsibility for independent critical thinking, efficient learning habits, and interpretation of technical information will fall on the student, at a level commonly associated with undergraduate education.

IV. Course Outline

A. Introduction
   1. Introduction to Pavement structures.
   2. Pavements types.
   3. Design factors.
   4. Pavements (airports& highways).
B. Stresses and strains in flexible pavements
   1. Homogeneous mass.
   2. Layered systems.
C. Stresses and strains in rigid pavements
   1. Stresses due to curling
   2. Stresses and deflections due to loading.
   3. Stresses due to friction.
   4. Design of dowels and joints.
D. Traffic loading and volume.
   1. Design procedures.
   2. Equivalent single-wheel load.
   3. Equivalent single-axle factor.
   4. Traffic analysis.
E. Material characterization
   1. Resilient modulus.
   2. Fatigue characteristic.
F. Pavement performance
G. Reliability
H. Flexible pavement design
   1. AASHTO design method
I. Rigid pavement design
   1. PCA method
J. Asphaltic Concrete Mixture Design
   1. AASHTO Mix Design
   2. Superpave Mix Design
V. Instructional Goals and Student Outcomes

A. Instructional Goals. Instructor will introduce:
   1. basic skills in pavement design and analysis for highways and airports,
   2. pavement related testing and studies,
   3. the theoretical design of pavement structures,
   4. the practical (empirical) aspects of pavement design,
   5. analyzes and evaluation of pavement design parameters,
   6. analyzes and evaluation of pavement materials and construction methods,
   7. the typical engineering documentation and interaction with others in a professional manner,
   8. preservation, sharing, and analyzing information for pavement structures,
   9. team work to achieve goals efficiently and professionally,
 10. consideration of the wider perspective and diversity of the engineering profession when dealing with the social, economic, and environmental aspects in pavement design.

B. Student Outcomes. Students who successfully complete this course will be able to:
   1. visualize pavement design in the perspective to highway engineering,
   2. integrate and interact with transportation professionals and agencies,
   3. understand the importance of the interaction of the different highway engineering components,
   4. deliver a project report that meets the objectives of the pavement materials and pavement design aspects under consideration,
   5. realize of the dimensions and aspects of pavement structures,
   6. understand the basics of the design and analysis of pavement structures,
   7. relate to other courses in the field of transportation engineering to enhance his/her knowledge and skills in the design, operation, and management of highway facilities.

VI. Course Activities

A. Class meetings consist of lectures, multimedia presentations, discussions, and periodic examinations.
B. Students are assigned required reading and homework problems to analyze measured data and evaluate analytical solution methods.
C. Students will complete a design project in the field of pavement structure within the time frame of the course.
D. Students are required to perform experiments in the lab, collect data, and analyze data.
VII. Course Evaluation. Methods of evaluation may include but are not limited to:

<table>
<thead>
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<tr>
<td>visualization of the pavement design in perspective to highway engineering</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
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<td>integration and interaction with the prospective transportation professionals and agencies</td>
<td>Performance in the lab, presentation of a design project.</td>
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<td>understanding the importance of the interaction of the different components of highway engineering components</td>
<td>Performance in the exam, quizzes, field projects, and homework assignments.</td>
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<td>delivering a project report that meets the objectives of the pavement materials and pavement design aspects under consideration</td>
<td>Performance in the exam, quizzes, field projects, and homework assignments.</td>
</tr>
<tr>
<td>realization of the diminutions and aspects of pavement structures</td>
<td>Performance in the final exam, quizzes, field projects, term design project, and homework assignments.</td>
</tr>
<tr>
<td>understanding the basics in the design and analysis of pavement structures</td>
<td>Performance in the final exam, quizzes, field projects, term design project, and homework assignments.</td>
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<td>Relate to further courses in the field of transportation engineering to enhance his/her knowledge and skills in design</td>
<td>Performance in preparing, presenting, and writing a design project.</td>
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VIII. Suggested Text:

IX. Alternative texts and references:


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<td>ITS Research Center, Texas A&amp;M</td>
<td><a href="http://www.rce.tamu.edu">www.rce.tamu.edu</a></td>
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- Change
- Delete

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<th>CE A424</th>
<th>Cross-Listed Coordination Signature</th>
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<tr>
<td>Department, School, or College</td>
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<td>Initiator Signature</td>
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<td>Fine Arts</td>
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<td>Natural Sciences</td>
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</table>

<table>
<thead>
<tr>
<th>17a. Course Prerequisite(s) (list prefix and number)</th>
<th>17b. Test Score(s)</th>
<th>17c. Co-requisite(s) (concurrent enrollment required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE A402 with a grade of C or better</td>
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<table>
<thead>
<tr>
<th>17d. Other Restriction(s)</th>
<th>17e. Registration Restriction(s) (non-codable)</th>
</tr>
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<tbody>
<tr>
<td>College</td>
<td>Major</td>
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<td></td>
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</table>

| 18. Mark if course has fees |

<table>
<thead>
<tr>
<th>19. Justification for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective course for Master in Science in Civil Engineering, providing specialized practical training in transportation engineering. Note: Course to be stacked with CE A424 Pavement Design.</td>
</tr>
</tbody>
</table>
Department: Civil Engineering

Course Prefix, Number, and Title: CE A624 Pavement Design

I. Course description
Analysis and design of highway and airport pavements, principles of theoretical and practical approaches for the design of flexible and rigid pavement structures. Methods for asphalt concrete mixture design and performance measures.

II. Course Design

A. Fundamental intent: Designed as a technical elective for graduate students majoring in Civil Engineering.
Note: Course to be stacked with CE A424 Pavement Design.

B. Number of Semester Credits: Three (3)

C. Course Schedule: Standard fifteen (15) week semester.

D. Lectures Hours/week: Two (2)

E. Laboratory Hours/week: Two (2)

F. Total time of work expected outside of class: Five (8) hours per week.

G. Programs that require this course: Technical elective for Masters of Science in Civil Engineering.

H. Grading: A – F

I. Coordination with affected unites: Faculty list serve. Only the Department of Civil Engineering is affected.

J. Justification for Action: Elective course for the Masters in Science in Civil Engineering, providing specialized practical training in transportation engineering.

K. Prerequisite: CE A402.

L. Registration Restrictions:
III. Course level justification

A. The course will involve application of engineering and scientific knowledge and skills typical of graduate engineering students.
B. The primary context of the course will be discussion and interaction among professional peers on advanced topics, with the basic assumption that students are accustomed to this level of interaction.
C. Lectures, multimedia presentations, and required reading will include advanced scientific and engineering topics that require for correct interpretation a background in math and science equivalent to that of master’s degree programs in engineering.
D. Students in the course analyze measured data and evaluate analytical methods to solve problems typical of advanced engineering and applied science research and practice.
E. Significant responsibility for independent critical thinking, efficient learning habits, and interpretation of technical information will fall on the student, at a level commonly associated with graduate education.

IV. Course Outline

A. Introduction
   1. Introduction to Pavement structures.
   2. Pavements types.
   3. Design factors.
   4. Pavements (airports & highways).
B. Stresses and strains in flexible pavements
   1. Homogeneous mass.
   2. Layered systems.
C. Stresses and strains in rigid pavements
   1. Stresses due to curling
   2. Stresses and deflections due to loading.
   3. Stresses due to friction.
   4. Design of dowels and joints.
D. Traffic loading and volume.
   1. Design procedures.
   2. Equivalent single-wheel load.
   3. Equivalent single-axle factor.
   4. Traffic analysis.
E. Material characterization
   1. Resilient modulus.
   2. Fatigue characteristic.
F. Pavement performance
G. Reliability
H. Flexible pavement design
   1. AASHTO design method
I. Rigid pavement design
   1. PCA method
J. Asphaltic Concrete Mixture Design
   1. AASHTO Mix Design
   2. Superpave Mix Design
K. Research application in the field of pavement materials and design.
V. Instructional Goals and Student Outcomes
   A. Instructional Goals. Instructor will introduce:
      1. basic skills in pavement design and analysis for highways and airports,
      2. pavement related testing and studies,
      3. the theoretical design of pavement structures,
      4. the practical (empirical) aspects of pavement design,
      5. analyzes and evaluation of pavement design parameters,
      6. analyzes and evaluation of pavement materials and construction methods,
      7. the typical engineering documentation and interaction with others in a professional manner,
      8. preservation, sharing, and analyzing information for pavement structures,
      9. team work to achieve goals efficiently and professionally,
     10. consideration of the wider perspective and diversity of the engineering profession when dealing with the social, economic, and environmental aspects in pavement design.
   B. Student Outcomes. Students who successfully complete this course will demonstrate knowledge and skills in the following areas:
      1. visualize pavement design in the perspective to highway engineering,
      2. integrate and interact with transportation professionals and agencies,
      3. understand the importance of the interaction of the different highway engineering components,
      4. delivering a project report that meets the objectives of the pavement materials and pavement design aspects under consideration,
      5. realize of the diminutions and aspects of pavement structures,
      6. understanding the basics of the design and analysis of pavement structures,
      7. relate to other courses in the field of transportation engineering to enhance his/her knowledge and skills in the design, operation, and management of highway facilities.

VI. Course Activities
   A. Class meetings consist of lectures, multimedia presentations, discussions, and periodic examinations.
   B. Students are assigned required reading and homework problems to analyze measured data and evaluate analytical solution methods.
   C. Students will complete a scientific paper and design project in the field of pavement structures and materials within the time frame of the course.
   D. Students are required to perform experiments in the lab, collect data, and analyze data.
VII. Course Evaluation. Methods of evaluation may include but are not limited to:

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>visualization of the pavement design in perspective to highway engineering.</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
</tr>
<tr>
<td>integration and interaction with the prospective transportation professionals and agencies,</td>
<td>Performance in the lab, presentation of scientific paper and in a design project.</td>
</tr>
<tr>
<td>understanding the importance of the interaction of the different components of highway engineering components,</td>
<td>Performance in the exam, quizzes, field projects, and homework assignments.</td>
</tr>
<tr>
<td>delivering a project report that meets the objectives of the pavement materials and pavement design aspects under consideration,</td>
<td>Performance in the exam, quizzes, field projects, and homework assignments.</td>
</tr>
<tr>
<td>realization of the diminutions and aspects of pavement structures,</td>
<td>Performance in the final exam, quizzes, field projects, term design project, and homework assignments.</td>
</tr>
<tr>
<td>understanding the basics in the design and analysis of pavement structures,</td>
<td>Performance in the final exam, quizzes, field projects, term design project, and homework assignments.</td>
</tr>
<tr>
<td>relate to further courses in the field of transportation engineering to enhance his/her knowledge and skills in the design.</td>
<td>Performance in preparing, presenting, writing a design project and scientific paper.</td>
</tr>
</tbody>
</table>

VIII. Suggested Text:

IX. Alternative texts and references:


### Websites:

- **American Association of State and Highway transportation Officials (AASHTO)**
  - www.transportation.org
- **Transportation Research Board**
  - www.trb.org
- **U.S. Bureau of Transportation Statistics**
  - www.bts.gov
- **Automotive Technology**
  - www.automotive-technology.com
- **U.S. Department of Transportation**
  - www.dot.gov
- **ITS Research Center, Texas A&M**
  - www.rce.tamu.edu
- **Asphalt Institute**
  - www.asphaltinstitute.org
<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>EN SOENGR</th>
</tr>
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<tbody>
<tr>
<td>1b. Division</td>
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<td>1c. Department</td>
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<tr>
<th>2. Course Prefix</th>
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<tr>
<td>3. Course Number</td>
<td>A425</td>
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<tr>
<td>4. Previous Course Prefix &amp; Number</td>
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<td>5a. Credits/CEU</td>
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<table>
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<tr>
<th>6. Complete Course/Program Title</th>
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<td>Highway Engineering</td>
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<th>8. Type of Action</th>
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<th>10. Grading Basis</th>
<th>☑ A-F</th>
<th>☑ P/NP</th>
<th>☑ NG</th>
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<th>11. Implementation Date</th>
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<td>From: Fall/2009</td>
<td>To: 99/9999</td>
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<tr>
<th>12. Cross Listed with</th>
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<tbody>
<tr>
<td>☑ Stacked with CE A625</td>
<td>Cross-Listed Coordination Signature</td>
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</table>

<table>
<thead>
<tr>
<th>13. List any programs or college requirements that require this course</th>
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<tbody>
<tr>
<td>Technical elective for Bachelor of Science in Civil Engineering.</td>
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<th>14. Coordinate with Affected Units:</th>
<th>UAA list serve</th>
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<td>Department, School, or College</td>
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<tr>
<td>Initiator Signature</td>
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<tr>
<td>Date</td>
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<tr>
<th>15. General Education Requirement</th>
<th>Oral Communication</th>
<th>Written Communication</th>
<th>Quantitative Skills</th>
<th>Humanities</th>
<th>Fine Arts</th>
<th>Social Sciences</th>
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<th>Integrative Capstone</th>
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</table>

<table>
<thead>
<tr>
<th>16. Course Description</th>
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<tbody>
<tr>
<td>Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences. The stacked course CE A625 designed as a technical elective for graduate students pursuing a Master of Science in Civil Engineering.</td>
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<th>17a. Course Prerequisite(s) (list prefix and number)</th>
<th>CE A402 with a grade of C or better</th>
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<td>17b. Test Score(s)</td>
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<td>17c. Co-requisite(s) (concurrent enrollment required)</td>
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<tr>
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</table>

<table>
<thead>
<tr>
<th>18. Mark if course has fees</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>19. Justification for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective course for the Bachelor of Science in Civil Engineering degree. Course description updated and refined. Goals and outcomes updated and refined.</td>
</tr>
</tbody>
</table>
Department: Civil Engineering

Course Prefix, Number, and Title: CE A425 Highway Engineering

I. Course description
Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

II. Course Design
A. Fundamental Intent: Designed as a technical elective for undergraduate seniors majoring in Civil Engineering.

B. Number of Semester Credits: Three (3).

C. Course Schedule: Standard fifteen (15) week semester.

D. Lectures Hours/week: Two (2).

E. Laboratory Hours/week: Three (3).

F. Total time of work expected outside of class: Six (6) hours per week.

G. Programs that require this course: Technical elective for Bachelor of Science in Civil Engineering.

H. Grading: A – F.

I. Fee: Yes.

J. Coordination with affected units: UAA list serve.

K. Justification for action: Elective course for the Bachelor of Science in Civil Engineering degree. Course description updated and refined. Goals and outcomes updated and refined.

L. Prerequisite: CE A402 with minimum grade of “C”.

M. Registration Restrictions: N/A.

III. Course level justification
This senior level technical elective requires specialized prerequisite knowledge and skills and the ability to synthesize this knowledge to plan and design highway components at a level equivalent to professional practice.
IV. Course Outline
   A. Highway surveys and location
      1. Techniques for highway location
      2. Principles of highway location
   B. Geometric design of highway facilities
      1. Highway functional classification
      2. Factors influencing highway location
      3. Highway design standards
      4. Cross-sectional elements
      5. Design of alignment – vertical alignment
      6. Horizontal alignment
      7. Special facilities for heavy vehicle/grades
      8. Parking facilities
   C. Local urban streets
      1. General design considerations:
         a. Design traffic volumes
         b. Design speed
         c. Sight distance
         d. Grades
         e. Alignment
   D. Urban arterials
      1. General design considerations:
         a. Design speed
         b. Design traffic volumes
         c. Sight distance
         d. Grades
         e. Alignment
   E. Freeways
      1. General design considerations
         a. Design speed
         b. Design traffic volumes
         c. Levels of service
         d. Pavement and shoulders
   F. Highway Drainage
      1. Surface drainage
      2. Highway drainage structures
      3. Subsurface drainage
   G. Soil engineering for highway design
      1. Classification of soils for highway use
      2. Soil survey for highway construction
      3. Soil compaction
      4. Tests for soil for pavement design
   H. Bituminous mixtures
      1. Bituminous materials
      2. Properties of asphalt mixtures
      3. Mix design methods and tests
   I. Flexible pavement design
      1. Components of flexible pavements
      2. Design variables
      3. Thickness design of flexible pavements
   J. Rigid pavement design
1. Materials used in rigid pavement
2. Joints in concrete pavements
3. Pumping of rigid pavements
4. Stresses in rigid pavements
5. Thickness design of rigid pavements

K. Introduction to pavement management
   1. Highway rehabilitation
   2. Methods for measuring roadway condition
   3. Pavement rehabilitation

V. Instructional Goals and Student Outcomes
   A. Instructional Goals. The instructor will introduce:
      1. basic skills in highway engineering and design,
      2. skills for the analysis of route survey and location,
      3. basics in the evaluation route alternatives,
      4. basics in highway design criteria and standards,
      5. basics in material properties, specification, and analysis which relate to pavement structures,
      6. the design of flexible and rigid pavements,
      7. basics in pavement management,
      8. the typical skills for interacting with other engineers in a professional manner,
      9. preserving, sharing, analyzing, and conducting research in highway engineering,
      10. team work skills to achieve their goals efficiently and professionally,
      11. considerations of the wider perspective and diversity of the engineering profession when dealing with the social, economic, and environmental aspects in traffic engineering.

   B. Student Outcomes. Students who successfully complete this course will be able to:
      1. comprehend and determine parameters related to selection of highway routes,
      2. recognize and apply the techniques for evaluation of highway routes,
      3. identify and apply highway design standards,
      4. discuss and analyze highway design case studies,
      5. analyze properties of construction materials related to transportation facilities,
      6. design highway pavement structures,
      7. prepare and write a design project report within a team and conduct a research in the subject area,
      8. integrate the social, economic, and environmental aspects in a design project report,

VI. Course activities
   A. Class meetings consist of lectures, multimedia presentations, discussions, and periodic examinations.
   B. Students are assigned required reading and homework problems to analyze measured data and evaluate analytical solution methods.
   C. Students will complete a design project in the field of highway geometrical design.
   D. Students are required to perform experiments in the field, collect data, and analyze data.
Course Evaluation: Methods of evaluation may include but are not limited to:

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehend and determine parameters related to the selection of highway route.</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
</tr>
<tr>
<td>Recognize and review the techniques in the evaluation of highway routes.</td>
<td>Performance in presentation of a design project report.</td>
</tr>
<tr>
<td>Identify and review highway design parameters and standards.</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
</tr>
<tr>
<td>Discuss and analyze cases of highway design.</td>
<td>Performance in presentation design project report.</td>
</tr>
<tr>
<td>Comprehend and discuss properties of construction materials related to transportation facilities.</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
</tr>
<tr>
<td>Analyze and design highway pavement structures.</td>
<td>Performance in presentation a design project report.</td>
</tr>
<tr>
<td>Prepare and write a design project with a team.</td>
<td>Performance in preparing, presenting and writing a design project report.</td>
</tr>
<tr>
<td>Integrate the social, economic, and environmental aspects in the design.</td>
<td>Performance in the final exam and term design project report.</td>
</tr>
</tbody>
</table>

VII. Suggested Text:


VIII. Alternative texts and references:


**IX. Web References**

American Association of State and Highway transportation Officials (AASHTO)  www.transportation.org

American Public Transit Association  www.apta.com

Transportation Research Board  www.trb.org

U.S. Bureau of Transportation Statistics  www.bts.gov

Automotive Technology (Projects …etc)  www.automotive-technology.com

Institute of Transportation Engineers  www.ite.org

U.S. Department of Transportation  www.dot.gov
## Curriculum Action Request
### University of Alaska Anchorage
Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>1b. Division</th>
<th>1c. Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN SOENGR</td>
<td></td>
<td>CIVIL ENGINEERING</td>
</tr>
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<table>
<thead>
<tr>
<th>2. Course Prefix</th>
<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
<th>5a. Credits/CEU</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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<tr>
<td>CE</td>
<td>A625</td>
<td>N/A</td>
<td>3.0 CR</td>
<td>(2+3)</td>
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</table>

### 6. Complete Course/Program Title
Highway Engineering

### Abbreviated Title for Transcript (30 character)

### 7. Type of Course
- [ ] Academic
- [ ] Non-credit
- [ ] CEU
- [ ] Professional Development

### 8. Type of Action
- [x] Add
- [ ] Change
- [ ] Delete

### 9. Repeat Status
- [ ] No
- [ ] # of Repeats: 0
- [ ] Max Credits: N/A

### 10. Grading Basis
- [x] A-F
- [ ] P/NP
- [ ] NG

### 11. Implementation Date
- From: Fall/2009
- To: 99/9999

### 12. Cross Listed with
- [x] N/A
- [ ] Stacked
  - with CE A425

### 13. List any programs or college requirements that require this course
Technical elective for Master of Science in Civil Engineering.

### 14. Coordinate with Affected Units:
- UAA list serve
- Department, School, or College

### 15. General Education Requirement
- [ ] Oral Communication
- [ ] Written Communication
- [ ] Quantitative Skills
- [ ] Humanities
- [ ] Fine Arts
- [ ] Social Sciences
- [ ] Natural Sciences
- [ ] Integrative Capstone

### 16. Course Description
Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

### 17a. Course Prerequisite(s)(list prefix and number)
CE A402 with a grade of C or better

### 17b. Test Score(s)
- N/A

### 17c. Co-requisite(s) (concurrent enrollment required)
- N/A

### 17d. Other Restriction(s)
- [ ] College
- [x] Major
- [ ] Class
- [ ] Level

### 17e. Registration Restriction(s) (non-codable)

### 18. Mark if course has fees

### 19. Justification for Action
New elective course for the Masters of Science in Civil Engineering degree. Course to be stacked with CE A425 Highway Engineering.

Note: The stacked course CE A425 designed as a technical elective for undergraduate students pursuing a Bachelor of Science in Civil Engineering.
Department: Civil Engineering

Course Prefix, Number, and Title: CE A625 Highway Engineering

I. Course description
Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

II. Course Design
A. Fundamental Intent: Designed as an elective course for graduate students majoring in Civil Engineering.
   Note: Course to be stacked with CE A425 Highway Engineering.

B. Number of Semester Credits: Three (3).

C. Course Schedule: Standard fifteen (15) week semester.

D. Lectures Hours/week: Two (2).

E. Laboratory Hours/week: Three (3).

F. Total time of work expected outside of class: Six (6) hours per week.

G. Programs that require this course: Elective course for Masters of Science in Civil Engineering.

H. Grading: A – F.

I. Fee: Yes.

J. Coordination with affected units: UAA list serve.

K. Justification for action: New elective course for the Masters of Science in Civil Engineering degree.

L. Prerequisite: CE A402.

M. Registration Restrictions:
III. Course level justification
This graduate level elective course requires specialized prerequisite knowledge and skills and the ability to synthesize this knowledge to plan and design highway components at a level equivalent to professional practice. The student should have the ability to conduct research in the subject area and produce a draft research paper.

IV. Course Outline
A. Highway surveys and location
   1. Techniques for highway location
   2. Principles of highway location
B. Geometric design of highway facilities
   1. Highway functional classification
   2. Factors influencing highway location
   3. Highway design standards
   4. Cross-sectional elements
   5. Design of alignment – vertical alignment
   6. Horizontal alignment
   7. Special facilities for heavy vehicle/grades
   8. Parking facilities
C. Local urban streets
   1. General design considerations:
      a. Design traffic volumes
      b. Design speed
      c. Sight distance
      d. Grades
      e. Alignment
D. Urban arterials
   1. General design considerations:
      a. Design speed
      b. Design traffic volumes
      c. Sight distance
      d. Grades
      e. Alignment
E. Freeways
   1. General design considerations
      a. Design speed
      b. Design traffic volumes
      c. Levels of service
      d. Pavement and shoulders
F. Highway Drainage
   1. Surface drainage
   2. Highway drainage structures
   3. Subsurface drainage
G. Soil engineering for highway design
   1. Classification of soils for highway use
   2. Soil survey for highway construction
   3. Soil compaction
   4. Tests for soil for pavement design
H. Bituminous mixtures
   1. Bituminous materials
   2. Properties of asphalt mixtures
   3. Mix design methods and tests
I. Flexible pavement design
   1. Components of flexible pavements
   2. Design variables
   3. Thickness design of flexible pavements
J. Rigid pavement design
   1. Materials used in rigid pavement
   2. Joints in concrete pavements
   3. Pumping of rigid pavements
   4. Stresses in rigid pavements
   5. Thickness design of rigid pavements
K. Introduction to pavement management
   1. Highway rehabilitation
   2. Methods for measuring roadway condition
   3. Pavement rehabilitation
L. Research application in the field of the design of highway Facilities.

V. Instructional Goals and Student Outcomes
A. Instructional Goals. The instructor will introduce:
   1. basic skills in highway engineering and design,
   2. skills for the analysis of route survey and location,
   3. basics in the evaluation route alternatives,
   4. basics in highway design criteria and standards,
   5. basics in material properties, specification, and analysis which relate to pavement structures,
   6. the design of flexible and rigid pavements,
   7. basics in pavement management,
   8. the typical skills for interacting with other engineers in a professional manner,
   9. preservation, sharing, analyzing, and conducting research in highway engineering,
  10. team work skills to achieve their goals efficiently and professionally,
  11. considerations of the wider perspective and diversity of the engineering profession when dealing with the social, economic, and environmental aspects in traffic engineering.

B. Student Outcomes. Students who successfully complete this course will be able to:
   1. comprehend and determine parameters related to selection of highway routes,
   2. recognize and apply the techniques for evaluation of highway routes,
   3. identify and apply highway design standards,
   4. discuss and analyze highway design case studies,
   5. analyze properties of construction materials related to transportation facilities,
   6. design highway pavement structures,
   7. prepare and write a design project report within a team and conduct a research in the subject area,
   8. integrate the social, economic, and environmental aspects in a design project report,

VI. Course activities
A. Class meetings consist of lectures, multimedia presentations, discussions, and periodic examinations.
B. Students are assigned required reading and homework problems to analyze measured data and evaluate analytical solution methods.
C. Students will complete a scientific paper and design project in any field related of highway geometric design.
D. Students are required to perform experiments in the field, collect data, and analyze data.
Course Evaluation: Methods of evaluation may include but are not limited to:

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehend and determine parameters related to the selection of highway route.</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
</tr>
<tr>
<td>Recognize and review the techniques in the evaluation of highway routes.</td>
<td>Performance in presentation of a design project report and in a design project.</td>
</tr>
<tr>
<td>Identify and review highway design parameters and standards.</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
</tr>
<tr>
<td>Discuss and analyze cases of highway design.</td>
<td>Performance in presentation design project report.</td>
</tr>
<tr>
<td>Comprehend and discuss properties of construction materials related to transportation facilities.</td>
<td>Performance in the exam, quizzes, and homework assignments.</td>
</tr>
<tr>
<td>Analyze and design highway pavement structures.</td>
<td>Performance in presentation a design project report and in a design project.</td>
</tr>
<tr>
<td>prepare and write a design project report within a team and conduct a research in the subject area.</td>
<td>Performance in preparing, presenting and writing a design project report and scientific paper.</td>
</tr>
<tr>
<td>Integrate the social, economic, and environmental aspects in the design.</td>
<td>Performance in preparing, presenting, and writing a design project and scientific paper.</td>
</tr>
</tbody>
</table>

VII. Suggested Text:


VIII. Alternative texts and references:


IX. Web References

American Association of State and Highway transportation Officials (AASHTO)  
www.transportation.org

American Public Transit Association  
www.apta.com

Transportation Research Board  
www.trb.org

U.S. Bureau of Transportation Statistics  
www.bts.gov

Automotive Technology (Projects …etc)  
www.automotive-technology.com

Institute of Transportation Engineers  
www.ite.org

U.S. Department of Transportation  
www.dot.gov
### Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

1. **School or College**: AS CAS
2. **Course Prefix**: n/a
3. **Course Number**: n/a
4. **Division**: choose one
5. **Department**: n/a
6. **Contact Hours**: (Lecture + Lab) (n/a+)
7. **Complete Course/Program Title**: Associate of Arts
8. **Type of Course**: Academic, Non-credit, CEU, Professional Development
9. **Type of Action**: Course, Program
10. **Repeat Status**: No
11. **Grading Basis**: A-F, P/NP, NG
12. **Implementation Date**: From: 2009/2009 To: 9999/9999
13. **Cross Listed with**: Stacked
14. **Course Description**: n/a
15. **Course Prerequisite(s)**: n/a
16. **Course Description**: n/a
17. **Test Score(s)**: n/a
18. **Co-requisite(s)**: n/a
19. **Registration Restriction(s)**: n/a
20. **Mark if course has fees**

### Justification for Action

Numbering seventeen, the AA program outcomes in the AA Assessment Plan are overly long and, in places, redundant. The revised set of seven outcomes is more focused and coherent for faculty and meaningful to students. Since all program outcomes need to be published, these briefer, more focused outcomes will require less catalog space. Additionally, while the AA program outcomes have received faculty input at the department and division level, they have not been through the formal curricular approval process.

---

**Initiator (faculty only)**

Suzanne Forster, AA Assessment Coord.

**Initiator (TYPE NAME)**

---

**Approved**

Disapproved:

Department Chairperson

---

**Approved**

Disapproved:

Curriculum Committee Chairperson

---

**Approved**

Disapproved:

Dean/Director of School/College

---

**Approved**

Disapproved:

Undergraduate or Graduate Academic Board Chairperson

---

**Approved**

Disapproved:

Provost or Designee

---
Date: October 26, 2008

To: Brian Wick, Chair, College of Arts and Sciences Course and Curriculum Committee, James Liszka, Dean, College of Arts and Sciences, Hilary Davies, Chair, Undergraduate Academic Board Michael Driscoll, Provost

From: Associate of Arts Program Assessment Committee, Shawnalee Whitney, Oral Communication Skills, Patricia M. Jenkins, Written Communication Skills, John Mouracade, Humanities, Charles Licka, Fine Arts, Hilary Davies, Mathematical Sciences, Jerry D. Kudenov, Natural Sciences, John Petraitis, Social Sciences, Suzanne Forster, Associate of Arts Assessment Coordinator

RE: Revised Associate of Arts Program Outcomes

Please accept the proposed changes to the College of Arts and Sciences Associate of Arts (AA) Program Outcomes. Numbering seventeen, the current AA program outcomes are overly long and, in places, redundant. The revised set of seven outcomes should be more focused and coherent for faculty and meaningful to students. Since all program outcomes need to be published, these briefer, more focused outcomes will require less catalog and/or web space. Additionally, while the AA program outcomes have received faculty input at the department and division level, they have not been through the formal curriculum approval process.

Attached are the proposed revised program outcomes and the current ones, both of which were drafted by the AA Assessment Committee. We also seek guidance as to where the outcomes should be published: in the catalog and/or on the CAS website.

**Proposed Associate of Arts Degree Program Outcomes**

Students graduating with an Associate of Arts degree from UAA will be able to

Communicate effectively with diverse audiences (individual, group, or public) using a variety of verbal and nonverbal communication strategies;

Respond effectively to writing assignments using appropriate genres and Standard Written English;

Use library and electronic research responsibly and appropriately;

Identify, describe, and evaluate the aesthetic, historical and philosophical aspects of material culture, including artistic expressions, language, and texts;

Apply critical thinking skills to identify the premises and conclusions of arguments, evaluate their soundness, and recognize common fallacies;
Use appropriate mathematical language and symbols to develop and communicate solutions, and demonstrate quantitative and analytical skills and knowledge;

Articulate the fundamentals, developments, and impacts of one or more scientific disciplines; and develop and analyze evidence-based conclusions about the natural and social world.

**Current AA Degree Program Outcomes (in the AA Assessment Plan)**

Students graduating with an Associate of Arts degree from UAA will be able to

<table>
<thead>
<tr>
<th>Oral Communication Skills</th>
<th>Fine Arts</th>
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</thead>
<tbody>
<tr>
<td>1. Demonstrate an understanding of the communication process and communication components involved in the process</td>
<td></td>
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<tr>
<td>• Source field of experience/encoding</td>
<td></td>
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<tr>
<td>• Receiver field of experience/encoding</td>
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<tr>
<td>• Feedback and the dynamic nature of the communication process</td>
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<tr>
<td>• Message components</td>
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<tr>
<td>• Channel types</td>
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<tr>
<td>2. Understand how to effectively adapt a message to an audience (individual, group, or public)</td>
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<tr>
<td>• Message construction, organization, transitions and connections</td>
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<tr>
<td>• Message support including pathos, logos, and ethos appeals</td>
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<tr>
<td>• Nonverbal adaptation including voice, posture, volume, eye contact, space, touch</td>
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<tr>
<td>• Listening and responsiveness to feedback</td>
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<tr>
<td>• Receiver attributes and needs</td>
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<tr>
<td>• External factors</td>
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<tr>
<td>1. Identify and describe art works by reference and formal content concerns</td>
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<tr>
<td>• historical context and expressive style</td>
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<tr>
<td>• structural principles of design/composition</td>
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<tr>
<td>• organization of design and compositional elements</td>
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<td>• media</td>
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<td>2. Interpret the meaning/intent of art work and evaluate their stylistic and cultural significance</td>
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<tr>
<td>• personal responses</td>
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<tr>
<td>• substantive and critical evaluation through their historical and critical importance and their relationship to the time period produced and their contemporary reception</td>
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<tr>
<td>Written Communication Skills</td>
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<td>--------------------------------</td>
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<tr>
<td>1. Use Standard Written English correctly and effectively</td>
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<tr>
<td>- Write sentences that follow rules for sentence mechanics (capitalization and punctuation)</td>
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</tr>
<tr>
<td>- Write sentences that follow rules for structural relationships (comparison, coordination, correlation, negation, parallelism, and subordination)</td>
<td></td>
</tr>
<tr>
<td>- Write sentences that follow rules for grammatical relationships (adjectives, adverbs, nouns, pronouns, and verbs)</td>
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<tr>
<td>2. Respond appropriately and effectively to writing assignments</td>
<td></td>
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<tr>
<td>- Use an appropriate genre</td>
<td></td>
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<tr>
<td>- Adhere to genre expectations and conventions for content, development, and structure</td>
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<tr>
<td>- Respond to audience needs</td>
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<tr>
<td>- Focus on a purpose</td>
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<tr>
<td>- Adopt appropriate voice, tone, and level of formality</td>
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<tr>
<td>- Use appropriate technical, professional, or academic language and style</td>
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<tr>
<td>- Provide appropriate and effective rhetorical and structural cues</td>
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<tr>
<td>3. Use research responsibly and effectively</td>
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<tr>
<td>- Locate or produce appropriate research for writing assignments</td>
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<td>- Integrate research effectively</td>
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<tr>
<td>- Use research effectively</td>
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<tr>
<td>- Avoid plagiarism by knowing how, when, and where to document sources</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Humanities</th>
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<tbody>
<tr>
<td>Content-oriented courses</td>
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<tr>
<td>- Identify texts or objects, place them in the historical context of the discipline, articulate the central problem they address, and provide reasoned assessment of their significance</td>
</tr>
<tr>
<td>Skills-oriented courses in logic</td>
</tr>
<tr>
<td>- Identify the premises and conclusions of brief written arguments, evaluate their soundness or cogency, and recognize common fallacies</td>
</tr>
<tr>
<td>- Use the formal techniques to determine the validity of simple deductive arguments and evaluate the adequacy of evidence according to appropriate inductive standards</td>
</tr>
<tr>
<td>Skills-oriented courses in language</td>
</tr>
<tr>
<td>- Demonstrate proficiency in listening, speaking and writing in a foreign language.</td>
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<tr>
<td>Social Sciences</td>
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<tr>
<td>------------------------------------------</td>
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<tr>
<td>1. Apply the scientific method to</td>
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<tr>
<td>understanding the social world</td>
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<tr>
<td>2. Develop and analyze evidence-based</td>
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<tr>
<td>conclusions about the social world</td>
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</table>
I would appreciate feedback on the instructions for Boxes 13 and 14 in the Curriculum Handbook. In particular I would appreciate input on the 10 day coordination time period. When this policy was initiated, the coordination was done by intercampus mail on the Anchorage campus and regular mail to the Community Campuses. Since all communication is electronic these days, I am requesting your review of the timelines, i.e. the 10 working days permitted for comment.

**CAR Box 13. List any programs or college requirements that include this course**

Identifies all majors, minors, certificates, or college requirements that include the proposed course. Generally, an elective is not considered a requirement. The department initiating the proposal is also responsible for coordinating with each affected program (See Box 14, below, for further information). Affected programs may be required to submit a CAR.

**CAR Box 14. Coordination with Affected Units**

Coordination is the requirement that all initiators of curriculum actions identify and notify all academic units who may be affected by the curriculum change of the precise nature of their proposal. Coordination is always expected between and among department chairs and deans in Anchorage, as well as directors of community campuses.

The purpose of coordination is to:

a) allow affected units who may have a legitimate interest in the course or program proposal, opportunities to review and comment on such proposals before they are considered by the college curriculum committees and the UAB/GAB.

b) encourage collaboration among all academic units;

c) maintain and improve quality of academic offerings.

An affected unit is defined as a department or academic unit whose curriculum will be affected by the proposed curricular action.

Coordination with affected units is required in the following cases:

- When the degree, course, name or content bridges material regularly included in other disciplines (e.g., Business proposed change to “Business Statistics”).
- When the course or program includes or requires prerequisite courses for other degree programs, sites, or campuses.
- When the proposed program can reasonably be expected to use courses offered by other disciplines.
- When a subsequent allocation of resources resulting from the proposal will impact the unit’s ability to deliver academic courses required in other programs.
- When a course is a General Education Requirement.
Coordination should be initiated very early in the curriculum development process – before finalization of the proposal.

Coordination includes:

a) sending proposed curriculum to affected units
b) actively seeking collaboration, comments and suggestions
c) allowing ten days from the published date of notification of affected units before moving the proposed curriculum through the established levels of review.

d) **Email notification.** In addition to coordination and sending proposed curriculum (or making it available on the web) to the director and department chair of affected units, initiating faculty are also required to send an email notification to faculty list-serve at: uaa-faculty@lists.uaa.alaska.edu giving a brief overview of the proposal including:

1) description of the proposed action,
2) course prefix,
3) course number,
4) course description,
5) prerequisite(s)
6) any other relevant information.

Evidence of coordination with affected units is required using the Curriculum Coordination Form or a coordination email memo, and the initiator signature on the CAR form. Affected academic units are encouraged to submit written support or objection to UAB/GAB and/or to speak to the proposal at the appropriate Board meeting. If no written comments are received by the UAB/GAB within ten (10) working days of the Notification Date, it is assumed that there are no objections to the proposal.

**Do not** send proposals as attachments when sending email notices to the faculty list-serve since large files can cause problems.