Undergraduate Academic Board

Agenda

August 21, 2009
ADM 204 at 2:00-5:00

I. Roll

( ) Hilary Davies  ( ) Cheryl Smith  ( ) Deborah Fox
( ) Bettina Kipp Lavea  ( ) Toni Croft  ( ) Utpal Dutta
( ) Suzanne Forster  ( ) Oliver Hedgepath  ( ) (VACANT, FS At Large, CAS)
( ) Kerri Morris  ( ) Kenrick Mock  ( ) (VACANT, FS At Large)
( ) Susan Wilson  ( ) Marion Yapuncich  ( ) (VACANT, Kodiak)
( ) Hilary Seitz  ( ) Kevin Keating  ( ) (VACANT, USUAA)

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

III. Approval of Meeting Summary for April 24, 2009 (pg. 3-6)

IV. Administrative Report
A. Associate Vice Provost Bart Quimby

B. Registrar John Allred
Policy Issues:
Blanket petitions
Incomplete grades

V. Chair’s Report
A. UAB Chair- Hilary Davies
   Summer recap
   Order of agenda

B. GERC Chair-

VI. Program/Course Action Request – Second Reading
NONE

VII. Program/Course Action Request – First Reading

Chg ATP A116 Instrument Ground School (3 cr) (3+0) (pg. 7-11)
Chg ATP A200 Commercial Ground School (3 cr) (3+0) (pg. 12-16)
Chg ATP A300 CFI Ground School (3 cr) (3+0) (pg. 17-22)
Chg Minor, Health & Fitness Leadership (pg. 23-25)
Chg Occupational Endorsement Certificate, Fitness Leadership (pg. 26-29)
Chg PEP A115 Fitness Leadership/ Group Fitness and Personal Training (3 cr) (3+0) (pg. 30-35)
Chg PEP A116 Techniques in Group Fitness Instruction (2 cr) (1+2) (pg. 36-40)
Chg PEP A117 Techniques in Personal Training (2 cr) (1+2) (pg. 41-46)
Del PEP A215 Issues in Fitness Leadership (3 cr) (3+0) (pg. 47)
Del PEP A216 Techniques in Fitness Instruction II (2 cr) (1+2) (pg. 48)
Del PEP A217 Techniques in Personal Instruction II (2 cr) (1+2) (pg. 49)
Del PEP A218 Techniques in Aqua Fitness Instruction (2 cr) (1+2) (pg. 50)
Chg JUST A250 Development of Law (3 cr) (3+0) (pg. 51-57)
Add BIOL A365 Astrobiology (3 cr) (3+0) (cross listed w/ASTR A365) (pg. 58-63)
Add ASTR A365 Astrobiology (3 cr) (3+0) (cross listed w/BIOLA365) (pg. 64-70)
Add NS A439 Spirituality in Nursing (3 cr) (3+0) (pg. 71-75)

VIII. Old Business

IX. New Business
A. UAB Goals for 2009-2010 (pg.76-77)
   B. Election of the UAB/GERC members

X. Informational Items and Adjournment
A. Curriculum Log
B. Curriculum Handbook
C. Catalog Copy
I. Roll

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

II. Approval of the Agenda (pg. 1-4)
Approved

III. Approval of Meeting Summary for April 17, 2009 (pg. 5-9)
PEP and PER courses are all CTC courses
Approved

IV. Administrative Report
A. Associate Vice Provost Bart Quimby
   Unable to attend

B. Registrar John Allred
   4 policy issues from the registrar

V. Chair’s Report
A. UAB Chair- Hilary Davies
   Purge List (pg. 10-28)
   Waived first reading and approved for second reading

B. GER Chair- Suzanne Forster
   Unable to attend GER- Erik Hirschman was chair
   Approved PS A331, A332, A333, and ECON A210

VI. Program/Course Action Request – Second Reading
A. CAS
   Chg PS A331 Political Philosophy (3 cr) (3+0) (pg. 29-34)
   Chg PS A332 History of Political Philosophy I: Classical (3 cr) (3+0) (pg. 35-39)
   Chg PS A333 History of Political Philosophy II: Modern (3 cr) (3+0) (pg. 40-45)
   All PS courses approved

   Chg HIST A257A The Alaska-Yukon Gold Rush (3 cr) (3+0) (pg. 46-51)
   Chg HIST A261 Russian History (3 cr) (3+0) (pg. 52-58)
   HIST A257A and HIST A261 approved

   Chg HIST A477 Senior Seminar (3 cr) (3+0) (pg. 59-66)
   Approved

B. CBPP
   Chg ECON A210 Environmental Economics and Policy (3 cr) (3+0) (pg. 67-73)
   Approved

   [1st reading] Del ENVI A210 Environmental Economics and Policy (3 cr) (3+0) (pg. 74)
   Waived first reading, approved for second reading
Waived first reading, approved for second reading

Chg ECON A350  Money and Banking (3 cr) (3+0) (pg. 78-81)
Approved

Chg ECON A363  International Economics (3 cr) (3+0) (pg. 82-85)
Approved

Add ECON A390  Special Topics in Economics (3 cr) (3+0) (pg. 86-90)
Approved

Waived first reading, approved for second reading

Add ECON A290  Special Topics in Economics (3 cr) (3+0) (pg. 91-95)

C. CHSW

Chg NURS A222  Pediatric Nursing (3 cr) (3+0) (pg. 96-100)
Approved

Chg NURS A222L  Pediatric Nursing Lab (1 cr) (0+1) (pg. 101-105)
Approved

Waived first reading, approved for second reading

D. KPC

Add ART A220  Digital Imaging for Photography (3 cr) (0+6) (pg. 115-119)

Chg ART A225  Beginning Photography- Digital (3 cr) (0+6) (pg. 120-124)
Approved

Add VETT A101  Introduction to the Veterinary Profession (1 cr) (1+0) (pg. 157-161)
Add VETT A103  Veterinary Office Procedures (3 cr) (3+0) (pg. 162-167)
Add VETT A122  Basic Handling & Behavior: Small Animals (2 cr) (2+0) (pg. 168-172)
Add VETT A123  Basic Handling and Behavior: Large Animals (2 cr) (2+0) (pg. 173-178)
Add VETT A124  Introduction to Small Animals (3 cr) (3+0) (pg. 179-184)
Add VETT A125  Introduction to Large Animals (3 cr) (3+0) (pg. 185-190)

MOTION (Cheryl Smith): Tabled until Fall when Kenai and Anchorage campuses can coordinate together.
2nd: Mari Ippolito
For 9
Against 2
Approved

E. MAT-SU
Add  VETT A201  Veterinary Anatomy and Physiology (4 cr) (3+2) (pg. 191-197)
Add  VETT A295  Veterinary Assistant Practicum (3 cr) (0+9) (pg. 198-202)
Add  VETT  Veterinary Assisting (pg. 203-204)

Approved

F.  SOE

Chg  CE A431  Structural Analysis (4 cr) (4+0) (pg. 205-208)
Approved

VII.  Program/Course Action Request – First Reading

Curriculum Received After Catalog Deadline; UAB may not get to these items this academic year.

Chg  Undergraduate Certificate, Early Childhood Development (pg. 209-215)
Chg  Post-Baccalaureate Certificate, Early Childhood Pre-K-Third Grade (pg. 216-218)

Both COE programs waived first reading and approved for second reading

Chg  ENGL A476  History of English Language (3 cr) (3+0) (pg. 219-222)
Waived first reading and approved for second reading

Chg  CSE A205  Introduction to C Programming for Engineers (3 cr) (3+0) (pg. 237-240)
Chg  CSE A215  Object-Oriented C++ Programming for Engineers (3 cr) (3+0) (pg. 241-244)
Add  CSE A225  Assembly Language Programming for Engineers (3 cr) (3+0) (pg. 245-248)
Add  CSE A335  Operating Systems Engineering (3 cr) (3+0) (pg. 249-252)
Add  CSE A345  Algorithms for Engineering Applications (3 cr) (3+0) (pg. 253-256)
Add  CSE A355  Computer Networks Engineering (3 cr) (3+0) (pg. 257-260)

Chg  ENGR A105A  Engineering Computer-Aided Design I (1 cr) (1+0) (pg. 275-277)
Chg  ENGR A105B  Engineering Computer-Aided Design II (1 cr) (1+0) (pg. 278-280)
Chg  ENGR A105C  Engineering Computer-Aided Design III (1 cr) (1+0) (pg. 281-283)
Del  ENGR A392  Engineering Seminar III (1 cr) (1+0) (pg. 284)
Del  ENGR A438  Engineering Systems Design (3 cr) (3+0) (pg. 285)

MOTION: Untabled EE courses

For 7
Against 4
Approved

Del  EE A351  Signals and Systems (3 cr) (3+0) (pg. 261)
Accepted for first reading

Chg  EE A453  Introduction to Wi-Fi (1 cr) (1+0) (pg. 262-265)
Accepted for first reading

Chg  EE A454  Systems Reliability Engineering (1 cr) (1+0) (pg. 266-268)
Accepted for first reading

Chg  EE A456  Fiber Optic Communications (1 cr) (1+0) (pg. 269-271)
Accepted for first reading

Chg  EE A458  Antenna Theory (3 cr) (3+0) (pg. 272-274)
Accepted for first reading

VIII.  Old Business
A. Engineering memo from Grant Baker (pg. 286)
   MOTION (Mari Ippolito): Approved trial courses in Grant Bakers memo for one more semester.
   10 for
   Approved

B. Response from Sam Thiru (pg. 287-288)

IX. New Business
A. Registrar`s memo and policy questions (pg. 289-290)
   Grade Changes portion approved  
   With change: Final day of the next first semester (Fall or Spring)

   Academic Petitions portion approved  
   With addition: must be admitted to a degree or program and with addition of clarification on the form

   Blanket petition portion and incomplete petition portion will be discussed in the Fall

B. Election of a new chair
   Hilary Davies elected as chair for 2009-2010

X. Informational Items and Adjournment
A. Curriculum Log
B. Curriculum Handbook
C. Catalog Copy
D. Curriculum Handbook (pg. 291)
### Curriculum Action Request

**University of Alaska Anchorage**

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

---

**1a. School or College**
CT CTC

**1b. Division**
AAVI Division of Aviation

**1c. Department**
ATP

**2. Course Prefix**
ATP

**3. Course Number**
A116

**4. Previous Course Prefix & Number**
N/A

**5a. Credits/CEU**
3 Credits

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

---

**6. Complete Course/Program Title**
Instrument Ground School

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**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: Fall/2009
To: /9999

---

**12. Cross Listed with**

- Stacked

---

**13. List any programs or college requirements that require this course**
- AAS: Professional Piloting
- BSAT: Professional Piloting

---

**14. Coordinate with Affected Units**
- CTC, KPC, KODIAK, MSC, PWS, CBPP, LISTSERVE

---

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

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**16. Course Description**
Provides preparation for the FAA Instrument Pilot Knowledge Test. Includes attitude instrument flying, air traffic control and navigation facilities, pilot responsibilities, IFR en route and approach navigation charts, airspace and airway route system.

**SPECIAL NOTE:** Two hours in a Flight Training Device (FTD) is required.

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**17a. Course Prerequisite(s) (list prefix and number)**
N/A

**17b. Test Score(s)**
N/A

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

**17d. Other Restriction(s)**

**17e. Registration Restriction(s) (non-codable)**
FAA Private Pilot Certificate or equivalent.

---

**18. Mark if course has fees**

---

**19. Justification for Action**
The current prerequisite and restrictions are allowing too many inadequately prepared students to enter this class. This change in prerequisite and registration restrictions will help to reduce this problem and will also help to ensure our students have a better opportunity to benefit from the course content.

---

**Initiator (faculty only) Date**
Mark E. Madden

---

**Initiator (TYPE NAME) Date**

---

**Approved**
Dean/Director of School/College

---

**Disapproved**

---

**Approved**
Department Chairperson

---

**Disapproved**

---

**Approved**
Academic Board Chairperson

---

**Disapproved**

---

**Approved**
Provost or Designee

---

Curriculum Committee Chairperson

---

7
I. Course Description:

Provides preparation for FAA Instrument Pilot Knowledge Test. Includes attitude instrument flying, air traffic control and navigation facilities, pilot responsibilities, IFR en route and approach navigation charts, airspace and airway route system.

Special Note: Two hours in Flight Training Device required.

II. Course Design:

A. Designed for students pursuing an AAS degree in Professional Piloting; BSAT, Professional Piloting emphasis.

B. 3.0 credits (3.0).

C. Total time of student involvement: 135 hours.
   1. 3 hours lecture/week for a total of 45 hours.
   2. 6 hours of outside work per week for a total of 90 hours.

D. This is a required course for the AAS: Professional Piloting. BSAT, Professional Piloting emphasis.

E. Lab fees are assessed.

F. Course may be taught in any time frame but not less than three weeks.

G. This is a revised course.

H. Coordinated with: CTC, KPC, KODIAK, MSC, PWS, CBPP, LISTSERVE.

I. This is a 100-level course because it provides basic knowledge.

III. Course Activities:

The course will be conducted by lecture, practical exercises, and the use of an occasional guest speaker.
IV. Course Prerequisite: None.

V. Registration Restriction: FAA Private Pilot Certificate or equivalent.

VI. Course Evaluation:

A. Grades will be A - F.

B. Evaluation will be based on objective testing, attendance, and successful completion of each assigned exercise.

C. Each instructor will explain specific grading policies and requirements at the beginning of the semester.

VII. Content Outline:

1.0 SAFETY
   1.1 General Rules
   1.2 Class Conduct
   1.3 Building Exit

2.0 IFR FARs

3.0 NAVIGATION DEVICES

4.0 ATTITUDE INSTRUMENT FLYING

5.0 FLIGHT PLANNING
   5.1 Certificates and Ratings
   5.2 Preflight Action for Flight
   5.3 Flight Plan
   5.4 Route Planning
   5.5 Flight Planning Computer Operation
   5.6 Aircraft Performance
   5.7 Aircraft Operating Limitations
   5.8 Aircraft Systems
   5.9 Weather Considerations

6.0 DEPARTURE
   6.1 Authority and Pilot Limitations
   6.2 ATC Communications
   6.3 Taxi and Takeoff Procedures
   6.4 Departure Procedures
   6.5 Pre-takeoff Check
   6.6 Airport Facilities
   6.7 FSS Facilities

7.0 EN ROUTE
   7.1 Limitations
   7.2 Procedures
   7.3 ATC Clearances
   7.4 Oxygen Requirements
   7.5 Emergencies
   7.6 Electronic Navigation
VIII. Instructional Goals:

Prepares the students for the FAA Instrument Pilot Knowledge Test.

IX. Course Outcomes and Assessment Procedures:

<table>
<thead>
<tr>
<th>Upon successful completion of this course, students will be able to:</th>
<th>Assessment Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the operation of an aircraft under Instrument Flight Rules in the National Airspace System, including interpretation of instrument reference publications.</td>
<td>Written assignments Oral discussions Performance tests</td>
</tr>
<tr>
<td>Explain the systems and appliances found on a typical instrument qualified general aviation airplane.</td>
<td>Written assignments Oral discussions Performance tests</td>
</tr>
<tr>
<td>Plan an instrument cross-country flight taking into consideration airspace and regulatory requirements, weather, and airplane performance.</td>
<td>Written assignments Oral discussions Performance tests</td>
</tr>
</tbody>
</table>

X. Suggested Text:

XI. Bibliography:


1a. School or College  
CT CTC

1b. Division  
AAVI Division of Aviation

1c. Department  
ATP

2. Course Prefix  
ATP

3. Course Number  
A200

4. Previous Course Prefix & Number  
N/A

5a. Credits/CEU  
3 Credits

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

6. Complete Course/Program Title  
Commercial Ground School

Abbreviated Title for Transcript (30 character)

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

8. Type of Action  
☐ Add  ☑ Change  ☐ Delete

☐ Prefix  ☐ Credits  ☐ Grading Basis  ☐ Title  ☐ Course Description  ☐ Test Score Prerequisites  ☐ Other Restrictions  ☐ Class  ☐ Level  ☐ Other CCG  ☐ Course Number  ☐ Contact Hours  ☐ Repeat Status  ☐ Cross-Listed/Stacked  ☐ Course Prerequisites  ☐ Co-requisites  ☐ Registration Restrictions

9. Repeat Status No  # of Repeats  Max Credits

10. Grading Basis  
☐ A-F  ☐ P/NP  ☐ NG

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

12. ☐ Cross Listed with  
☐ Stacked with  
Cross-Listed Coordination Signature

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

AAS: Professional Piloting  
BSAT: Professional Piloting

14. Coordinate with Affected Units:  
CTC, KPC, KODIAK, MSC, PWS, CBPP, LISTSERVE  
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

Provides preparation for the FAA Commercial Pilot Knowledge Test. Includes advanced studies of Private Pilot and Instrument Pilot topics, high performance and complex aircraft, commercial flight maneuvers, and commercial Federal Aviation Regulations.

17a. Course Prerequisite(s) (list prefix and number)  
N/A

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)  
FAA Instrument Rating or equivalent.

18. ☐ Mark if course has fees

19. Justification for Action

The current prerequisite and restrictions are allowing too many inadequately prepared students to enter this class. This change in prerequisite and registration restrictions will help to reduce this problem and will also help to ensure our students have a better opportunity to benefit from the course content.

Initiator (faculty only)  
Date

Mark E. Madden  
Initiator (TYPE NAME)

Approved  
Disapproved:

Dean/Director of School/College  
Date

Approved  
Disapproved:

Department Chairperson  
Date

Approved  
Disapproved:

Academic Board Chairperson  
Date

Approved  
Disapproved:

Provost or Designee  
Date
I. Course Description:

Provides preparation for FAA Commercial Pilot Knowledge Test. Includes advanced studies of Private Pilot and Instrument Pilot topics, high performance and complex aircraft, commercial flight maneuvers, and commercial Federal Aviation Regulations.

II. Course Design:

A. Designed for students pursuing an AAS degree in Professional Piloting. BSAT, Professional Piloting emphasis.

B. 3.0 credits (3+0).

C. Total time of student involvement: 135 hours.

1. 3 hours lecture/week for a total of 45 hours.
2. 6 hours of outside work per week for a total of 90 hours.

D. This is a required course for the AAS, Professional Piloting and BSAT, Professional Piloting emphasis.

E. No lab fees are assessed.

F. Course may be taught in any time frame but not less than three weeks.

G. This is a revised course.

H. Coordinated with: CTC, KPC, KODIAK, MSC, PWS, CBPP, LISTSERVE.

I. This is a 200-level course because it builds on knowledge and information gained during and demonstrated by earning the Private Pilot Certificate and Instrument Pilot Rating.
III. Course Activities:

The course will be conducted by lecture, practical exercises and the use of an occasional guest speaker.

IV. Course Prerequisite: None.

V. Registration Restriction: FAA Instrument Rating or equivalent.

VI. Course Evaluation:

A. Grades will be A - F.

B. Evaluation will be based on objective testing, attendance, and successful completion of each assigned exercise.

C. Each instructor will explain specific grading policies and requirements at the beginning of the semester.

VII. Content Outline:

1.0 SAFETY
   1.1 General Rules
   1.2 Class Conduct
   1.3 Building Exit

2.0 REVIEW
   2.1 Four Forces Acting on an Airplane in Flight
   2.2 Principles of Lift
   2.3 Flight Control Systems
   2.4 Secondary Flight Controls
   2.5 Three Axes of Rotation
   2.6 Left-turning Tendency
   2.7 Multi-engine Considerations

3.0 POWERPLANT AND SYSTEMS OF A COMPLEX AIRPLANE
   3.1 The Reciprocating Engine
   3.2 Fuel Systems
   3.3 Engine Cooling
   3.4 Engine Lubrication System
   3.5 Ignition System
   3.6 Constant Speed Propellers
   3.7 Electrical System
   3.8 Utility Systems
   3.9 Retractable Landing Gear

4.0 FLIGHT INSTRUMENTS
   4.1 Magnetic Compass
   4.2 Pressure (Pitot-Static System)
4.3 Gyroscopic
4.4 Slip/Skid Indicator

5.0 WEIGHT AND BALANCE
5.1 Terms
5.2 Change of Weight (addition and subtraction)
5.3 Weight and its Effect on Performance
5.4 Balance and its Effect on Stability and Control
5.5 Weight and Balance Calculation Methods

6.0 AIRPLANE PERFORMANCE
6.1 Take-off Calculations
6.2 Climb Airspeeds
6.3 Time to Climb
6.4 Cruise Performance
6.5 Time to Descend
6.6 Landing Performance
6.7 Other

7.0 PRIMARY NAVIGATION
7.1 Types of Navigation
  7.1.1 Pilotage
  7.1.2 Dead reckoning
  7.1.3 Electronic navigation
7.2 VFR Type Charts
  7.2.1 Sectional Aeronautical Charts
  7.2.2 World Aeronautical Charts
  7.2.3 VFR Terminal Area Charts
7.3 IFR Type Charts

8.0 THE NATIONAL AIRSPACE SYSTEM
8.1 Airport Lighting and Marking
8.2 Runway Markings
8.3 Wind Direction/Landing Runway Indicators
8.4 Airport Operations

9.0 ELECTRONIC NAVIGATION AIDS

10.0 REVIEW OF INSTRUMENT PROCEDURES
10.1 Departure
10.2 Enroute
10.3 Arrival

11.0 WEATHER THEORY

12.0 PROBLEM WEATHER
12.1 Fronts
12.2 Turbulence
12.3 Fog
12.4 Icing
12.5 Thunderstorms

13.0 GATHERING WEATHER INFORMATION
13.1 Surface Analysis Chart
13.2 Weather Depiction Chart
13.3 Low Level Significant Weather Program
13.4 Radar Summary Chart
13.5 Aviation Weather reports
13.6 Aviation Weather forecasts

14.0 APPLICABLE COMMERCIAL FEDERAL AVIATION REGULATIONS (FARs)
15.0 FLIGHT PLANNING PUBLICATIONS
16.0 MEDICAL FACTS FOR PILOTS

VIII. Instructional Goals:

Prepares the students for the FAA Commercial Pilot Knowledge Test.

IX. Course Outcomes and Assessment Procedures:

<table>
<thead>
<tr>
<th>Upon successful completion of this course, students will be able to:</th>
<th>Assessment Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain the rules governing Commercial Pilot privileges and limitations in the National Airspace System.</td>
<td>Written assignments</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
</tr>
<tr>
<td>Describe the systems and appliances found on a typical commercial airplane.</td>
<td>Written assignments</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
</tr>
<tr>
<td>Plan a commercial cross-country flight taking into consideration airspace and regulatory requirements, weather, and airplane performance.</td>
<td>Written assignments</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
</tr>
</tbody>
</table>

X. Suggested Text:


XI. Bibliography:


Curriculum Action Request
University of Alaska Anchorage
Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

1a. School or College  
CT CTC

1b. Division  
AAVI Division of Aviation

1c. Department  
ATP

2. Course Prefix  
ATP

3. Course Number  
A300

4. Previous Course Prefix & Number  
N/A

5a. Credits/CEU  
3 Credits

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

6. Complete Course/Program Title  
CFI Ground School

7. Type of Course  
学术

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: Fall/2009  
To: 9999

12. [ ] Cross Listed with  
[ ] Stacked with  
Cross-Listed Coordination Signature

13. List any programs or college requirements that require this course  
BSAT: Professional Piloting

14. Coordinate with Affected Units:  
CTC, KPC, KODIAK, MSC, PWS, CBPP, LISTSERVE  
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  
Prepares students for the FAA Certified Flight Instructor Knowledge Test. Includes principles of teaching and learning, analysis of student motivation, flight training syllabus, and the flight instructor's role and responsibilities. Covers performance and analysis of flight training maneuvers, advanced aerodynamics, fundamentals of instrument flight, flight training publications, and Federal Aviation Regulations.

17a. Course Prerequisite(s) (list prefix and number)  
N/A

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)  
FAA Commercial Pilot Certificate with Instrument Rating or equivalent.

18. [ ] Mark if course has fees

19. Justification for Action  
The current prerequisite and restrictions are allowing too many inadequately prepared students to enter this class. This change in prerequisite and registration restrictions will help to reduce this problem and will also help to ensure our students have a better opportunity to benefit from the course content.

Initiator (faculty only)  
Mark E. Madden  
Initiator (TYPE NAME)

Approved  
Disapproved:

Dean/Director of School/College  
Date

Approved  
Disapproved:

Undergraduate or Graduate  
Date

Approved  
Disapproved:

Academic Board Chairperson  
Date

Approved  
Disapproved:

Provost or Designee  
Date
I. Course Description:

Prepares students for the FAA Certified Flight Instructor Knowledge Tests. Includes principles of teaching and learning, analysis of student motivation, flight training syllabus, and the flight instructor's role and responsibilities. Covers performance and analysis of flight training maneuvers, advanced aerodynamics, fundamentals of instrument flight, flight training publications, and Federal Aviation Regulations.

II. Course Design:

A. Designed for students pursuing an AAS degree in Professional Piloting; BSAT, Professional Piloting emphasis.

B. 3.0 credits (3+0).

C. Total time of student involvement: 135 hours.
   1. 3 hours lecture/week for a total of 45 hours.
   2. 6 hours of outside work per week for a total of 90 hours.

D. This is a required course for BSAT, Professional Piloting emphasis.

E. No lab fees.

F. Course may be taught in any time frame but not less than three weeks.

G. This is a revised course.

H. Coordinated with: CTC, KPC, KODIAK, MSC, PWS, CBPP, LISTSERVE.

I. This is a 300-level course because it builds on knowledge and information gained during and demonstrated by earning the Private and Commercial Pilot Certificates and the Instrument Pilot Rating. Additionally, the student will develop Lesson Plans and be able to analyze performance deficiencies in pilot applicants.
III. Course Activities:

The course will be conducted by lecture, practical exercises, and the use of an occasional guest speaker.

IV. Course Prerequisite: None.

V. Registration Restriction: FAA Commercial Pilot Certificate with Instrument Rating or equivalent.

VI. Course Evaluation:

A. Grades will be A - F.

B. Evaluation will be based on objective testing, attendance, and successful completion of each assigned exercise.

C. Each instructor will explain specific grading policies and requirements at the beginning of the semester.

VII. Content Outline:

1.0 SAFETY
   1.1 General Rates
   1.2 Class Conduct
   1.3 Building Exit

2.0 THE LEARNING PROCESS
   2.1 Definition of Learning
   2.2 Laws of Learning
   2.3 How People Learn
   2.4 Levels of Learning
   2.5 Forgetting and Retention
   2.6 Habit Formation
   2.7 Obstacles to Learning
   2.8 The Instructor's Role in Training

3.0 HUMAN BEHAVIOR
   3.1 Control of Human Behavior
   3.2 Human Needs
   3.3 Defense Mechanisms
   3.4 The Instructor's Role in Human Relations

4.0 EFFECTIVE COMMUNICATION

5.0 THE TEACHING PROCESS
   5.1 Preparation
   5.2 Presentation
   5.3 Application
   5.4 Review and Evaluation
6.0 TEACHING METHODS
6.1 Material Organization
6.2 Lecture Method
6.3 Guided Discussion Method
6.4 Demonstration-performance Method

7.0 THE INSTRUCTOR AS A CRITIC

8.0 EVALUATION
8.1 Oral Quizzing
8.2 Written Tests
8.3 Performance Tests

9.0 INSTRUCTIONAL AIDS

10.0 FLIGHT INSTRUCTOR RESPONSIBILITIES

11.0 TEACHING
11.1 Four Forces Acting on an Airplane in Flight
11.2 Principles of Lift
11.3 Flight Control Systems
11.4 Secondary Flight Controls
11.5 Three Axes of Rotation
11.6 Left Turning Tendency
11.7 Airplane Powerplant and Systems
11.8 Flight Instruments
11.9 Weight and Balance
11.10 Airplane Performance
   11.10.1 Take-off calculations
   11.10.2 Climb airspeeds
   11.10.3 Cruise performance
   11.10.4 Landing performance
   11.10.5 Other
11.11 Primary Navigation
   11.11.1 Types of navigation
   11.11.2 VFR type charts
   11.11.3 Cartographics
   11.11.4 Basics of navigation
   11.11.5 Airspace considerations
11.12 The Flight Computer
   11.12.1 Calculator side
   11.12.2 Wind-face side
11.13 The National Airspace System
11.14 Radio Communication
11.15 Electronic Navigation
11.16 Basic Weather Theory
11.17 Problem Weather
   11.17.1 Fronts
   11.17.2 Turbulence
   11.17.3 Fog
   11.17.4 Icing
11.17.5 Thunderstorms

11.18 Gathering Weather Information
11.18.1 Surface Analysis Chart
11.18.2 Weather Depiction Chart
11.18.3 Low Level Significant Weather Prognostic Chart
11.18.4 Radar Summary Chart
11.18.5 Aviation weather reports
11.18.6 Aviation weather forecasts

11.19 Federal Aviation Regulations (FAR's)
11.19.1 Part 1 - Definitions and Abbreviations
11.19.2 Part 61 - Certification: Pilots and Flight Instructors
11.19.3 Part 91
11.19.4 Part 135
11.19.5 NTSB 830

11.20 Flight Planning Publications
11.20.1 Aeronautical Information Manual (AIM)
11.20.2 Advisory Circular (AC)
11.20.3 Airworthiness Directives (AD)
11.20.4 Notices to Airmen (NOTAM)
11.20.5 Airport/Facility Directory
11.20.6 Alaska Supplement

11.21 Medical Facts for Pilots

VIII. Instructional Goals:

Prepares students for the FAA Certified Flight Instructor Knowledge Test.

IX. Course Outcomes and Assessment Procedures:

<table>
<thead>
<tr>
<th>Upon successful completion of this course, students will be able to:</th>
<th>Assessment Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply applicable teaching techniques as a Flight Instructor.</td>
<td>Written assignments</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
</tr>
<tr>
<td>Describe the learning process associated with individuals being introduced to new topics and skills.</td>
<td>Written assignments</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
</tr>
<tr>
<td>Plan and execute student Lesson Plans in an effective manner.</td>
<td>Written assignments</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
</tr>
<tr>
<td>Present and discuss those topics required of a pilot flying in the National Airspace System.</td>
<td>Oral exams</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
</tr>
<tr>
<td>Analyze performance deficiencies in pilot applicants.</td>
<td>Oral exams</td>
</tr>
<tr>
<td></td>
<td>Oral discussions</td>
</tr>
<tr>
<td></td>
<td>Performance tests</td>
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</table>
X. Suggested Text:


XI. Bibliography:


### 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>CT CTC</td>
<td>APER Division of Physical Ed Rec</td>
<td>HPER</td>
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<table>
<thead>
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<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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<table>
<thead>
<tr>
<th>6. Complete Course/Program Title</th>
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<tbody>
<tr>
<td>Minor, Health &amp; Fitness Leadership</td>
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**Abbreviated Title for Transcript (30 character)**

<table>
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<tr>
<th>7. Type of Course</th>
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<tr>
<td>☑ Academic</td>
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<th>8. Type of Action</th>
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<td>☑ Change</td>
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<th>11. Implementation Date</th>
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<th>13. List any programs or college requirements that require this course</th>
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<tr>
<td>Occupational Endorsement Certificate, Fitness Leadership and Minor, Health &amp; Fitness Leadership</td>
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<th>14. Coordinate with Affected Units:</th>
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<td>UAA list serve, Culinary Arts and Hospitality Division</td>
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<th>Department, School, or College</th>
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<td>Initiator Signature</td>
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<th>15. General Education Requirement</th>
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<td>☐ Oral Communication</td>
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<tr>
<th>16. Course Description</th>
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<td>See attached catalog copy.</td>
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<table>
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<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>
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<td>☐ College</td>
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| 18. ☑ Mark if course has fees |

<table>
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<tr>
<th>19. Justification for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The catalog copy reflects changes to the programs.</td>
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</tbody>
</table>
**MINOR, HEALTH & FITNESS LEADERSHIP** *

Students who wish to minor in health & fitness leadership must complete the following requirements. A minimum of 19 credits including 6 upper division credits is required for the minor. Prerequisites for these courses must also be satisfied. Minimum grade of C or better in the courses within the option.

1. Complete the following core courses (16 credits):
   - DN A203  Nutrition for Health Sciences (3)  3
   - OR
   - DN A215  Sports Nutrition (3)  3
   - PEP A115  Introduction to Fitness Leadership  3
   - PEP A385  Physiology of Exercise  4
   - PEP A442  Exercise and Aging  3
   - PEP A452  Challenges in Health & Fitness Leadership  1
   - PEP A453  Health Promotion  2

2. Choose one of the following options:

   **Fitness Instruction Option (3 credits)**
   - PEP A116  Techniques in Fitness Instruction (2)
   - Choose PER activity course related to specialty (1)

   **Personal Training Option (3 credits)**
   - PEP A117  Techniques in Personal Training (2)
   - PER A118  Basic Weight Training (1)

   **Wellness Option (4 credits)**
   - PEP A116  Techniques in Fitness Instruction (2)
   - PEP A117  Techniques in Personal Training (2)

*Not available to physical education majors with health & fitness leadership emphasis.*
MINOR, HEALTH & FITNESS LEADERSHIP *

Students who wish to minor in health & fitness leadership must complete the following requirements. A total minimum of 19 credits including 6 upper division credits is required for the minor. Prerequisites for these courses must also be satisfied. Requires a minimum grade of C or better in the courses within the option.

1. Complete the following core courses (15-16 credits):
   - DN A203 Nutrition for Health Sciences (3)
   - OR
   - DN A215 Sports Nutrition (3)
   - PEP A115 Introduction to Fitness Leadership (3)
   - PEP A215 Issues in Fitness Leadership (3)
   - PEP A385 Physiology of Exercise (4)
   - PEP A442 Exercise and Aging (3)
   - PEP A452 Challenges in Health & Fitness Leadership (1)
   - PEP A453 Health Promotion (2)

2. Choose one of the following options: (4 credits)
   - **Fitness Instruction Option (3 credits)**
     - PEP A116 Techniques in Fitness Instruction I (2)
     - PEP A216 Techniques in Fitness Instruction II (2)
     - Choose PER activity course related to specialty (1)
   - **Personal Training Option (3 credits)**
     - PEP A117 Techniques in Personal Training I (2)
     - PEP A217 Techniques in Personal Training II (2)
     - PER A118 Basic Weight Training (1)
   - **Aqua Fitness Instruction Option**
     - PEP A116 Techniques in Fitness Instruction I (2)
     - PEP A218 Techniques in Aqua Fitness Instruction (2)
   - **Wellness Option (4 credits)**
     - PEP A116 Techniques in Fitness Instruction I (2)
     - PEP A117 Techniques in Personal Training I (2)

*Not available to physical education majors with health & fitness leadership emphasis.
1a. School or College
CT CTC

1b. Division
APER Division of Physical Ed Rec

1c. Department
HPER

2. Course Prefix
NA

3. Course Number
NA

4. Previous Course Prefix & Number
NA

5a. Credits/CEU
NA

5b. Contact Hours
(NA+     )

6. Complete Course/Program Title
Occupational Endorsement Certificate

Abbreviated Title for Transcript (30 character)

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

8. Type of Action
☐ Course
☑ Program

☐ Add
☐ Change
☐ Delete

☐ Prefix
☐ Credits
☐ Title
☐ Grading Basis
☐ Course Description
☐ Test Score Prerequisites
☐ Other Restrictions
☐ Class
☐ Level
☐ College
☐ Major
☐ Other catalog copy

9. Repeat Status No
☐ of Repeats
☐ Max Credits
NA

10. Grading Basis
☐ A-F
☐ P/NP
☐ NG

11. Implementation Date
From: Spring/2010                To:       /9999

12. ☐ Cross Listed with
☐ Stacked
☐ with NA
☐ Cross-Listed Coordination Signature

13. List any programs or college requirements that require this course
Occupational Endorsement Certificate, Fitness Leadership and Minor, Health & Fitness Leadership.

14. Coordinate with Affected Units:
UAA list serve, Culinary Arts and Hospitality Division
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
See attached catalog copy.

17a. Course Prerequisite(s) (list prefix and number)
NA

17b. Test Score(s)
NA

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

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

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

18. ☑ Mark if course has fees

19. Justification for Action
The catalog copy reflects changes to the programs.
OCCUPATIONAL ENDORSEMENT CERTIFICATE, FITNESS LEADERSHIP

The Fitness Leadership Occupational Endorsement Certificate provides students the opportunity to acquire the knowledge and skills necessary to develop a career in the ever changing fitness industry. An array of career possibilities is available to individuals who successfully complete this program in group fitness instruction or personal training.

This comprehensive program provides students with 90 hours of leadership training in exercise theory and practice and 60 hours of training in their chosen fitness specialty or emphasis area; Group Fitness Leader or Personal Trainer. All classes combine current fitness research and training techniques with practical, hands-on teaching experience. This program follows the guidelines established by the American Council on Exercise (ACE) and the American College of Sports Medicine (ACSM).

The Fitness Leadership Occupational Endorsement Certificate is designed to provide quality education and training to individuals interested in working in the fitness industry. Of the required 10 credits, 7 include lecture courses and 3 are laboratory sessions. The labs are enhanced by practicum experiences that reinforce skills, knowledge, and leadership qualities. Students receive training in basic applied kinesiology and exercise physiology, nutrition and healthy weight loss, injury prevention, fitness assessment, legal considerations, special populations, health screening, leadership and motivation.

ADMISSION REQUIREMENTS
Satisfy the UAA admissions requirements for Occupational Endorsement Certificates found in Chapter 7 of this catalog.

ACADEMIC PROGRESS
A minimum grade of B or better in each required course.

OCCUPATIONAL ENDORSEMENT REQUIREMENTS

1. Complete the following required courses:
   - PEP A112 1st Aid & CPR for Professionals 1
   - PEP A115 Introduction to Fitness Leadership 3
   - DN A101 Principles of Nutrition 3
   OR
   - DN A203 Nutrition for Health Sciences 3

2. Complete the required courses within one of the following two emphasis areas:
   **Group Fitness Leader**
   - PEP A116 Techniques in Fitness Instruction 2
   - Choose PER activity course related to specialty 1

   **Personal Trainer**
   - PEP A117 Techniques in Personal Training I 2
   - PER A118 Basic Weight Training 1

3. A total of 10 credits is required for this certificate.
**OCCUPATIONAL ENDORSEMENT CERTIFICATE, FITNESS LEADERSHIP**

The Fitness Leadership Occupational Endorsement Certificate provides students the opportunity to acquire the knowledge and skills necessary to develop a career in the ever changing fitness industry. An array of career possibilities is available to individuals who successfully complete this program in group fitness instruction, or personal training, or aquatics fitness instruction.

This comprehensive program provides students with 90 hours of leadership training in exercise theory and practice and 60 hours of training in their chosen fitness specialty or emphasis area; Group Fitness Leader, or Personal Trainer, or Aquatics Fitness Instructor. All classes combine current fitness research and training techniques with practical, hands-on teaching experience. This program follows the guidelines established by the American Council on Exercise (ACE) and the American College of Sports Medicine (ACSM).

The Fitness Leadership Occupational Endorsement Certificate is designed to provide quality education and training to individuals interested in working in the fitness industry. Of the required 10 credits, 6-7 include lecture courses and 4-3 are laboratory sessions. The labs are enhanced by practicum experiences that reinforce skills, knowledge, and leadership qualities. Students receive training in basic applied kinesiology and exercise physiology, nutrition and healthy weight loss, injury prevention, fitness assessment, legal considerations, special populations, health screening, leadership and motivation.

**ADMISSION REQUIREMENTS**

Satisfy the UAA admissions requirements for Occupational Endorsement Certificates found in Chapter 7 of this catalog.

**ACADEMIC PROGRESS**

A minimum grade of B or better in each required course with an overall GPA of 3.0 or better.

**OCCUPATIONAL ENDORSEMENT REQUIREMENTS**

1. Complete the following required courses:
   - **PEP A112**  1st Aid & CPR for Professional Rescuer  1
   - **PEP A115**  Introduction to Fitness Leadership  3
   - **PEP A215**  Issues in Fitness Leadership  3
   - **DN A101**  Principles of Nutrition  3
   - OR
   - **DN A203**  Nutrition for Health Sciences  3

2. Complete the required courses within one of the following three two emphasis areas:

   **Group Fitness Leader**
   - **PEP A116**  Techniques in Fitness Instruction I  2
   - **PEP A216**  Techniques in Fitness Instruction II  2
   - Choose PER activity course related to specialty  1

   **Personal Trainer**
   - **PEP A117**  Techniques in Personal Training I  2
PEP A217  Techniques in Personal Training II  
PEP A218  Techniques in Personal Training II  
PER A118  Basic Weight Training  

**Aqua Fitness Instructor**

PEP A116  Techniques in Fitness Instruction I
PEP A218  Techniques in Aqua Fitness Instruction

3. Possess current CPR and Standard First Aid certifications for professionals
4. A total of 10 credits is required for this certificate.
**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>
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<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</th>
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<tbody>
<tr>
<td>PEP</td>
<td>A115</td>
<td></td>
<td>3 credits</td>
<td>(Lecture + Lab)</td>
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<th>6. Complete Course/Program Title</th>
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<tbody>
<tr>
<td>Fitness Leadership/Group Fitness and Personal Training</td>
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<td>Abbreviated Title for Transcript (30 character)</td>
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<td>Fitness Ldrsp/Fitness&amp;PerTrain</td>
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<th>7. Type of Course</th>
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<td>P/NP</td>
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<td>To: /9999</td>
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<th>12.</th>
<th>13. List any programs or college requirements that require this course</th>
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<tbody>
<tr>
<td>Cross Listed with</td>
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<th>14. Coordinate with Affected Units:</th>
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<tr>
<th>15. General Education Requirement</th>
<th>16. Course Description</th>
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<tr>
<td>Oral Communication</td>
<td>Presents concepts of personally tailored fitness programs for a wide variety of individuals, including those with common health challenges. Introduces basics of cardiorespiratory, metabolic, neuromuscular, environmental exercise physiology, biomechanics and kinesiology in regard to safe exercise. Provides information on nutrition and weight loss, injury prevention, basic emergency procedures, legal issues, and professional responsibilities of fitness instructors and personal trainers.</td>
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<td>Written Communication</td>
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<td>Quantitative Skills</td>
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<td>Integrative Capstone</td>
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17a. Course Prerequisite(s) (list prefix and number): NA

17b. Test Score(s) | NA

17c. Co-requisite(s) (concurrent enrollment required): PEP A116 or PEP A117

17d. Other Restriction(s): College

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

18. Mark if course has fees

19. Justification for Action

This course combines two courses (PEP A115 & A215) into a single course. The course description and name was changed to reflect the combination. The co-requisite course was added. This course introduces the scientific basis of sound exercise programs and performance.
COURSE CONTENT GUIDE
UNIVERSITY OF ALASKA ANCHORAGE
COMMUNITY AND TECHNICAL COLLEGE

Department: HPER Date: April 2009

Course Number: PEP A115
Course Title: Fitness Leadership/Group Fitness and Personal Training
Credits: Three

I. Course Description:
Present concepts of personally tailored fitness programs for a wide variety of individuals, including those with common health challenges. Introduces basics of cardiorespiratory, metabolic, neuromuscular, environmental exercise physiology, biomechanics and kinesiology in regard to safe exercise. Provides information on nutrition and weight loss, injury prevention, basic emergency procedures, legal issues, and professional responsibilities of fitness instructors and personal trainers.

II. Course Design:
A. Designed for individuals interested in working in the fitness industry as a fitness instructor or personal trainer.
B. Three (3) credits.
C. Total time of student involvement: 135 hours
   1) Lecture: 45 hours
   2) Outside: 90 hours
D. Status of course relative to a degree or certificate program: Required for an Occupational Endorsement and selective for a minor in Health & Fitness Leadership.
E. Fees: A fee will be assessed
F. May be scheduled in any time frame, but not less than three weeks.
G. This is a revised course.
H. Coordinated with UAA List Serve
I. Course level justification: This is an introductory course.

III. Course Activities:
This course will be primarily conducted in a lecture setting with instruction on basic anatomy and physiology, kinesiology, exercise physiology, nutrition and weight loss, injury prevention, basic emergency procedures, legal issues, and professional responsibilities of fitness instructors and personal trainers.

IV. Course Co-requisites:
Students must be concurrently enrolled in PEP A117, Techniques in Personal Training, or PEP A116, Techniques in Fitness Instruction.

V. Course Evaluation:
Grades will be A-F based on written/oral examinations, written assignments, skill proficiency, class attendance and participation. Specific grading criteria will be discussed during the first class.
VI. Course Curriculum:

1.0 Course Introduction
   1.1 Class and campus safety
   1.2 Appropriate apparel & footwear

2.0 Exercise Physiology
   2.1 Components of Fitness
      2.1.1 Muscular strength
      2.1.2 Muscular endurance
      2.1.3 Cardiovascular/aerobic fitness
      2.1.4 Flexibility
      2.1.5 Body composition
   2.2 Bioenergetics of exercise
      2.2.1 ATP
      2.2.2 Aerobic vs Anaerobic production of energy
      2.2.3 Muscles and metabolism
   2.3 Neuromuscular system
      2.3.1 Basic organization of nervous system
      2.3.2 Basic organization of muscular system
      2.3.3 Types of muscular contractions
   2.4 Muscular response to training
      2.4.1 Muscular strength
      2.4.2 Muscular endurance
   2.5 Stretching techniques
      2.5.1 Static
      2.5.2 Ballistic
      2.5.3 PNF

3.0 Cardiovascular-respiratory systems
   3.1 Responses to aerobic exercise
      3.1.1 Oxygen delivery
      3.1.2 Oxygen carrying capacity
   3.2 Guidelines for improving cardiovascular-respiratory endurance
      3.2.1 Exercise intensity
      3.2.2 Exercise duration
      3.2.3 Exercise frequency
   3.3 Environmental considerations when exercising
      3.3.1 Heat
      3.3.2 Cold
      3.3.3 Altitudes

4.0 Basic Anatomy and Kinesiology
   4.1 Cardiovascular system
   4.2 Pulmonary system
   4.3 Nervous system
   4.4 Skeletal system
      4.4.1 Articulations
      4.4.2 Musculoskeletal lever system
   4.5 Muscular system
      4.5.1 Slow twitch
4.5.2 Fast twitch
4.5.3 Muscles in upper extremities
4.5.4 Muscles in lower extremities

5.0 Health Screening
5.1 Health screening process
5.2 Primary and secondary risk factors
5.3 Medical conditions that affect exercise
5.4 Common medications and their effect on exercise

6.0 Special Populations
6.1 Over exercising and under exercising
6.2 Individuals who are rehabilitating from injury
6.3 Lower back pain sufferer
6.4 Older adults
   6.4.1 Body composition
   6.4.2 Skeletal muscle and strength
   6.4.3 Flexibility
   6.4.4 Bone structure
   6.4.5 Maximal oxygen consumption
   6.4.6 Exercise modifications
6.5 Physiology of pregnancy
   6.5.1 Metabolic system
   6.5.2 Circulatory system
   6.5.3 Respiratory system
   6.5.4 Musculoskeletal system
   6.5.5 Prenatal and postpartum exercise recommendations
6.6 Exercise and youth
   6.6.1 Physiological differences
   6.6.2 Psychomotor skills
   6.6.3 Psychosocial skills

7.0 Legal Issues
7.1 Liability and negligence
7.2 Areas of responsibility
   7.2.1 Testing
   7.2.2 Instruction
   7.2.3 Supervision
   7.2.4 Facilities
   7.2.5 Equipment
   7.2.6 Waivers and informed consent
7.3 Copyright laws
   7.3.1 Performance licenses
   7.3.2 Duplication of recordings
   7.3.3 Exceptions to copyright law
   7.3.4 Obtaining protection for original material
7.4 Insurance needs
   7.4.1 General liability
   7.4.2 Professional liability
   7.4.3 Personal injury
7.4.4 Insurance market conditions

8.0 Injury Prevention
  8.1 Chronic injury versus acute injury
  8.2 Floor/exercise surfaces
  8.3 Shoes
  8.4 Exercise techniques and modifications
  8.5 High risk exercises
  8.6 General injury guidelines
  8.7 Common Aerobic exercise injuries

9.0 Nutrition and weight loss
  9.1 Basic nutrients
  9.2 Recommended guidelines
  9.3 Fad diets
  9.4 Ergogenic aids
  9.5 Nutrition and metabolism

10.0 Leadership and Motivation

VII. Suggested Textbooks:

VIII. Bibliography:

IX. Instructional Goals, Student Outcomes, and Assessment Procedures

Instructional Goals:
Prepare students to apply basic human anatomy, kinesiology and physiology and their application to overall physical fitness as well as issues and special considerations related to careers in the fitness profession.

<table>
<thead>
<tr>
<th>Student Outcomes</th>
<th>Assessment Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>After successful completion of the course, the student will be able to:</td>
<td></td>
</tr>
<tr>
<td>Demonstrate practical application of the components of physical fitness</td>
<td>Written Assignment</td>
</tr>
<tr>
<td>Explain the bioenergetics of exercise</td>
<td>Demonstration</td>
</tr>
<tr>
<td>Describe the cardiovascular-respiratory responses to aerobic exercise and how cardiovascular-respiratory endurance can be improved</td>
<td>Written Exam</td>
</tr>
<tr>
<td>Give examples of appropriate strengthening and flexibility exercises</td>
<td>Written Assignment</td>
</tr>
<tr>
<td>Describe basic exercise-related health screening procedures</td>
<td>Demonstration</td>
</tr>
<tr>
<td>Demonstrate general exercise modifications and techniques for a wide variety of individuals, including those with health challenges.</td>
<td>Demonstration</td>
</tr>
<tr>
<td>Employ injury prevention procedures in the fitness field</td>
<td>Demonstration</td>
</tr>
<tr>
<td>Discuss and describe healthy nutritional practices and legal issues associated with the fitness field.</td>
<td>Discussion</td>
</tr>
<tr>
<td></td>
<td>Written Exam</td>
</tr>
<tr>
<td>1a. School or College</td>
<td>1b. Division</td>
</tr>
<tr>
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<td>APER Division of Physical Ed Rec</td>
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<th>3. Course Number</th>
<th>4. Previous Course Prefix &amp; Number</th>
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<th>5b. Contact Hours (Lecture + Lab)</th>
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<th>10. Grading Basis</th>
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<td>☐ P/NP</td>
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<td>☐ NG</td>
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<tr>
<td>☐ NA</td>
<td>Required for an OEC, Fitness Leadership, and selective for a minor in Health &amp; Fitness Leadership.</td>
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<th>14. Coordinate with Affected Units:</th>
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<tr>
<td>Initiator Signature</td>
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<table>
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<tr>
<th>15. General Education Requirement</th>
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<tr>
<td>☐ Oral Communication</td>
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<tr>
<td>☐ Fine Arts</td>
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<table>
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<tr>
<th>16. Course Description</th>
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<tbody>
<tr>
<td>Introduces basic exercise program planning and progression, testing techniques, high risk exercises, music selection, choreography and teaching techniques. Examines a wide range of issues and formats related to exerciser’s varied needs. Conducted in a lab setting for hands-on experience.</td>
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<table>
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<th>17a. Course Prerequisite(s) (list prefix and number)</th>
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<table>
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<th>19. Justification for Action</th>
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<tr>
<td>This course combines two courses (PEP A116 &amp; PEP A216) into a single course. The course description and name was changed to reflect the combination of the two courses and a co-requisite course was added. This course provides a lab experience that relates to material covered in PEP A115.</td>
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COURSE CONTENT GUIDE
UNIVERSITY OF ALASKA ANCHORAGE
COMMUNITY AND TECHNICAL COLLEGE

Department: HPER
Course Number: PEP A116
Course Title: Techniques in Group Fitness Instruction
Credits: Two

Date: April 2009

I. Course Description:
Introduces basic exercise program planning and progression, testing techniques, high risk exercises, music selection, choreography and teaching techniques. Examines a wide range of issues and formats related to exerciser’s varied needs. Conducted in a lab setting for hands-on experience.

II. Course Design:
A. Designed for individuals interested in working in the fitness industry as a group fitness instructor.
B. Two (2) credits.
C. Total time of student involvement: 90 hours
   1) Lecture: 15 hours
   2) Lab: 30 hours
   3) Outside: 45 hours
D. Status of course relative to a degree or certificate program: Required for an Occupational Endorsement and selective for a minor in Health & Fitness Leadership.
E. A fee will be assessed.
F. May be scheduled in any time frame, but not less than two weeks.
G. This is a revised course.
H. Coordinated with UAA List Serve
I. Course level justification: This is an introductory course.

III. Course Activities:
A) Lecture – Introduces concepts and information necessary for a group fitness instructor. Instruction in basic program progression, testing techniques, contraindicated exercises, music selection, choreography and teaching techniques.  
B) Lab – Provides hands-on experience in fitness testing, choreography and teaching techniques.  
C) Practicum – Provides hands-on experience with qualified professionals in the field.

IV. Course Prerequisites:
Students must have taken or may be concurrently enrolled in PEP A115.

V. Course Evaluation:
Grades will be A-F based on written/oral examinations, written assignments, skill proficiency, class attendance and participation. Specific grading criteria will be discussed during the first class.

VI. Course Curriculum:
1.0 Course Introduction
  1.1 Class and campus safety
  1.2 Appropriate apparel & footwear

2.0 Group Fitness Goals
  2.1 Student objectives
  2.2 Instructor qualifications
  2.3 Fitness program overview

3.0 Class Design
  3.1 Warm up
  3.2 Pre-workout segment
  3.3 Core workout segment
  3.4 Cool down
  3.5 Muscular strength and conditioning
  3.6 Flexibility

4.0 Heart Rate Monitoring
  4.1 Formulas
  4.2 Monitoring devices
  4.3 Perceived exertion

5.0 Music Selection
  5.1 Guidelines for intensity levels/versus formats
  5.2 Calculating beats per minute of music selections
  5.3 Phrasing
  5.4 Categories/varieties

6.0 Cueing/Teaching Techniques
  6.1 Visual
  6.2 Verbal

7.0 Choreography Guidelines
  7.1 Freestyle/Choreographed patterns
  7.2 Simple vs complex
  7.3 Class components and exercise selection

8.0 Introduction to Choreographed Movements
  8.1 Common movements
  8.2 Combining moves to create basic patterns
  8.3 Modifications

9.0 Muscular Strength and Conditioning for Major Muscle Groups in the Upper Extremities
  9.1 Exercises to target specific muscles
  9.2 Modifications
  9.3 High risk exercises

10.0 Muscular Strength and Conditioning for Major Muscle Groups in the Lower Extremities
10.1 Exercises to target specific muscles
10.2 Modifications
10.3 High risk exercises

11.0 Introduction to Specialized Formats
11.1 Step
11.2 Hi/Lo
11.3 Kickboxing
11.4 Group cycling
11.5 Water
11.6 Intervals/Circuit/Cross training
11.7 Working with special equipment: fitball, rebounders, slide
11.8 Resistance training

12.0 Modifying and Implementing an Exercise Class for Special Populations
12.1 Over-exerciser
12.2 Sport specific
12.3 Overweight/obese
12.4 Injury rehab
12.5 Specific medical conditions
12.6 Older adults
12.7 Youth

13.0 Evaluating Health Clubs, Exercise Instructors and Workout Videos

14.0 Self-Evaluation of Teaching Style and Techniques

15.0 Employment Opportunities

VII. Suggested Textbooks:

VIII. Bibliography:

IX. Instructional Goals, Student Outcomes, and Assessment Procedures
**Instructional Goals:**

Provide the student with the skills and techniques for developing and administering personal fitness programs.

<table>
<thead>
<tr>
<th><strong>Student Outcomes</strong></th>
<th><strong>Assessment Procedures</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>After successful completion of the course, the student will be able to:</td>
<td></td>
</tr>
<tr>
<td>List and apply components of health-related physical fitness in an activity setting.</td>
<td>Demonstration Written Exam</td>
</tr>
<tr>
<td>Describe and demonstrate proper exercise technique as it relates to applied kinesiology.</td>
<td>Demonstration Written Exam</td>
</tr>
<tr>
<td>Design and facilitate a safe and effective warm up, core fitness activity, cool down and stretch.</td>
<td>Demonstration Written Assignment</td>
</tr>
<tr>
<td>Demonstrate proper exercise leadership and techniques in a wide variety of exercise and fitness class formats.</td>
<td>Demonstration</td>
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</table>
### 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>
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<tbody>
<tr>
<td>CT CTC</td>
<td>APER Division of Physical Ed Rec</td>
<td>HPER</td>
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<th>2. Course Prefix</th>
<th>3. Course Number</th>
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<th>5a. Credits/CEU</th>
<th>5b. Contact Hours (Lecture + Lab)</th>
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<td>Techniques in Personal Training</td>
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**Abbreviated Title for Transcript (30 character)**

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<tr>
<th>10. Grading Basis</th>
<th>11. Implementation Date</th>
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<td></td>
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<th>List any programs or college requirements that require this course</th>
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<tbody>
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<td>Required for an OEC, Fitness Leadership, and selective for a minor in Health &amp; Fitness Leadership.</td>
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<table>
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<th>16.</th>
<th>Course Description</th>
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<td>Introduces the basics of client assessment, proper use of resistance and cardio equipment, teaching techniques and injury prevention. Examines a wide range of issues related to exerciser's varied needs. Presents techniques for exercise program planning, implementation and progression for general and special populations.</td>
</tr>
</tbody>
</table>

**Special Note:** Designed for individuals interested in working in the fitness industry as a personal trainer. Conducted in a lab setting for hands-on experience.

<table>
<thead>
<tr>
<th>17a.</th>
<th>Course Prerequisite(s) (list prefix and number)</th>
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<th>Mark if course has fees</th>
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<tr>
<th>19.</th>
<th>Justification for Action</th>
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<td></td>
<td>This course combines two courses (PEP A117 &amp; PEP A217) into a single course. The course description was changed to reflect the combination of the two courses. The name was also changed, by dropping the &quot;I&quot; behind the original title and a co-requisite course was added. This course provides a lab experience that relates to material covered in PEP A115.</td>
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COURSE CONTENT GUIDE  
UNIVERSITY OF ALASKA ANCHORAGE 
COMMUNITY AND TECHNICAL COLLEGE

Department: HPER  
Date: April 2009

Course Number: PEP A117  
Course Title: Techniques in Personal Training  
Credits: Two

I. Course Description:
   Introduces the basics of client assessment, proper use of resistance and cardio equipment, teaching techniques and injury prevention. Examines a wide range of issues related to exerciser’s varied needs. Presents techniques for exercise program planning, implementation and progression for general and special populations.
   Special Note: Designed for individuals interested in working in the fitness industry as a personal trainer. Conducted in a lab setting for hands-on experience.

II. Course Design:
   A. Designed for individuals interested in working in the fitness industry as a personal trainer.
   B. Two (2) credits.
   C. Total time of student involvement: 90 hours
      1) Lecture: 15 hours
      2) Lab: 30 hours
      3) Outside: 45 hours
   D. Status of course relative to a degree or certificate program: Required for an Occupational Endorsement and selective for a minor in Health & Fitness Leadership.
   E. A fee will be assessed.
   F. May be scheduled in any time frame, but not less than two weeks.
   G. This is a revised course.
   H. Coordinated with UAA List Serve
   I. Course level justification: This is an introductory course.

III. Course Activities:
   A) Lecture - Further develops knowledge as it applies to exercise physiology, anatomy and kinesiology, health screening and injury prevention for general and special populations. 
   B) Lab – Provides hands-on experience in fitness assessment, health screening, resistance and cardio equipment use, client assessment techniques, program implementation and program progression for general and special populations. 
   C) Practicum – Provides hands-on experiences with qualified professionals in the field.

IV. Course Co-requisites:
   Student must have taken or be concurrently enrolled in PEP A115.

V. Course Evaluation:
Grades will be A-F based on written/oral examinations, written assignments, skill proficiency, class attendance and participation. Specific grading criteria will be discussed during the first class.

VI. Course Curriculum:
1.0 Course Introduction
   1.1 Class and campus safety
   1.2 Appropriate apparel & footwear

2.0 Personal Trainer Responsibilities
   2.1 Client responsibilities and scheduling
   2.2 Club responsibilities and policies
   2.3 Program design and equipment considerations
   2.4 Total program planning – wellness approach

3.0 Fitness Assessments/Profiles
   3.1 Medical history
   3.2 Basic fitness testing
      3.2.1 Cardiovascular
      3.2.2 Muscular strength/endurance
      3.2.3 Body composition
      3.2.4 Flexibility
      3.2.5 Posture
   3.3 Goal setting

4.0 Cardiorespiratory Training
   4.1 Responses to aerobic exercise
   4.2 How to monitor intensity
   4.3 Guidelines for improving cardiorespiratory endurance
   4.4 Exercise intensity, frequency and duration prescription
   4.5 Training methods
   4.6 Training Equipment
   4.7 Environmental considerations

5.0 Muscular Strength and Endurance Training
   5.1 Responses to strength and endurance training
   5.2 Program design and implementation
   5.3 Exercise intensity, frequency and duration prescription
   5.4 Guidelines for improving strength and endurance
   5.5 Speed
   5.6 Types of resistance equipment
   5.7 Starting resistance training
   5.8 Recovery
   5.9 Program progression

6.0 Flexibility Training
   6.1 Incorporating stretches into workout
   6.2 Exercise intensity, frequency and duration
   6.3 Modifications
7.0 Gym Safety

8.0 Movement Analysis with Resistance Equipment
   8.1 Free weights
   8.2 Machines
   8.3 Resistance aids

9.0 Strengthening and Stretching Exercises for the Upper Extremities
   9.1 Proper alignment
   9.2 Modifications
   9.3 High risk exercises

10.0 Strengthening and Stretching Exercises for the Lower Extremities
   10.1 Proper alignment
   10.2 Modifications
   10.3 High risk exercises

11.0 Planning a Personal Physical Activity Program
   11.1 Establishing reasons
   11.2 Identifying personal fitness needs
   11.3 Establishing physical activity and fitness goals
   11.4 Selecting activities
   11.5 Tracking client success – keeping records
   11.6 Planning physical activity programs for special populations
       11.6.1 The over-exerciser
       11.6.2 Sport specific
       11.6.3 Overweight/obese
       11.6.4 Injury rehab
       11.6.5 Specific medical conditions
       11.6.6 Older adults
       11.6.7 Youth
       11.6.8 Pre- and post-natal

12.0 Nutrition Analysis
   12.1 Determining the nutritional quality of client’s diet
   12.2 Determining average daily caloric intake
   12.3 Determining necessary changes in eating habits

13.0 Determining Healthy Weight Ranges
   13.1 Comparing and contrasting methods of assessing body composition
   13.2 Progress notes: charting behavior and weight/body comp changes
   13.3 Diet recommendations
   13.4 When the client needs to be referred to a nutrition expert

14.0 Stress Management
   14.1 Evaluating stress level
   14.2 Implications
   14.3 Coping mechanisms

15.0 Physical Activity Adherence
15.1 Deterrents to physical activity adherence
15.2 Factors that lead to physical activity adherence

16.0 Evaluating Exercises and Exercise Devices from the Literature
16.1 Facts about passive exercise and passive devices
16.2 Ways to identify frauds and rip-offs
16.3 Selecting exercise equipment
16.4 Choosing a health club
16.5 Choosing a fitness leader/trainer
16.6 Facts about fitness books, magazines and articles

17.0 Employment Opportunities

VII. Suggested Textbooks:

VIII. Bibliography:

IX. Instructional Goals, Student Outcomes, and Assessment Procedures

Instructional Goals:
Prepare students for developing and administering personal fitness programs.

<table>
<thead>
<tr>
<th>Student Outcomes</th>
<th>Assessment Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>After successful completion of the course, the student will be able to: Conduct fitness assessments, prescribe specific exercises to improve and/or maintain fitness, and evaluate prescribed programs for general and special populations</td>
<td>Written Assignment Demonstration Written Exam</td>
</tr>
<tr>
<td>Task</td>
<td>Assignment Type</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Design and facilitate a safe and effective warm up, core fitness</td>
<td>Written Assignment</td>
</tr>
<tr>
<td>activity, cool down and stretch</td>
<td>Demonstration</td>
</tr>
<tr>
<td>Demonstrate their understanding of nutritional guidelines and</td>
<td>Written Assignment</td>
</tr>
<tr>
<td>their ability to make appropriate recommendations</td>
<td>Discussion</td>
</tr>
<tr>
<td>Identify health frauds and promote health and wellness by sharing</td>
<td>Written Assignment</td>
</tr>
<tr>
<td>with the client information that is accurate and based on scientific</td>
<td>Discussion</td>
</tr>
<tr>
<td>evidence and research</td>
<td></td>
</tr>
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</table>
### 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>
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</thead>
<tbody>
<tr>
<td>CT CTC</td>
<td>APER Division of Physical Ed Rec</td>
<td>HPER</td>
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</table>

<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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<tbody>
<tr>
<td>PEP</td>
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<td>3 credit</td>
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<tr>
<th>6. Complete Course/Program Title</th>
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<tbody>
<tr>
<td>Issues in Fitness Leadership</td>
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**Abbreviated Title for Transcript (30 character)**

<table>
<thead>
<tr>
<th>7. Type of Course</th>
<th>8. Type of Action</th>
<th>9. Repeat Status No</th>
<th>10. Grading Basis</th>
<th>11. Implementation Date</th>
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<tbody>
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<td>Course</td>
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<td>Professional Development</td>
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<tr>
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<th>13. List any programs or college requirements that require this course</th>
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<tbody>
<tr>
<td>NA</td>
<td>Selective for an Occupational Endorsement and for a minor in Health &amp; Fitness Leadership.</td>
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<table>
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<th>14. Coordinate with Affected Units:</th>
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<table>
<thead>
<tr>
<th>15. General Education Requirement</th>
<th>16. Course Description</th>
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<tbody>
<tr>
<td>☐ General Communication</td>
<td>Presents concepts of personally tailored fitness programs for a wide variety of individuals, including those with common health challenges. Provides information on nutrition and weight loss, injury prevention, basic emergency procedures, legal issues, and professional responsibilities of fitness instructors and personal trainers.</td>
</tr>
<tr>
<td>☐ Written Communication</td>
<td></td>
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<tr>
<td>☐ Quantitative Skills</td>
<td></td>
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<td>☐ Humanities</td>
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</tr>
<tr>
<td>☐ Fine Arts</td>
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<td>☐ Social Sciences</td>
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<td>☐ Natural Sciences</td>
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<td>☐ Integrative Capstone</td>
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<th>17b. Test Score(s)</th>
<th>17c. Co-requisite(s) (concurrent enrollment required)</th>
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<td>1a. School or College</td>
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<th>3. Course Number</th>
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<th>5b. Contact Hours (Lecture + Lab)</th>
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<tbody>
<tr>
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<td>Tech Fitness Instruction II</td>
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<td></td>
<td>Prefix</td>
<td>Credits</td>
</tr>
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<td>Grading Basis</td>
<td>Course Description</td>
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<td>Class</td>
<td>Level</td>
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| 13. List any programs or college requirements that require this course |
| Selective for an Occupational Endorsement and for a minor in Health & Fitness Leadership. |

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

<table>
<thead>
<tr>
<th>15. General Education Requirement</th>
<th>Oral Communication</th>
<th>Written Communication</th>
<th>Quantitative Skills</th>
<th>Social Sciences</th>
<th>Natural Sciences</th>
<th>Fine Arts</th>
<th>Humanities</th>
<th>Integrative Capstone</th>
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</thead>
</table>

| 16. Course Description |
| Examine a wide range of issues and formats related to exerciser’s varied needs. Conducted in a lab setting for hands-on experience. |

<table>
<thead>
<tr>
<th>17a. Course Prerequisite(s) (list prefix and number)</th>
<th>PEP A116, PEP A215</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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<th>Level</th>
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| 18. Mark if course has fees | |

| 19. Justification for Action |
| The contents of this course are being combined with another course so this course should be deleted. |
### 1a. School or College
CT CTC

### 1b. Division
APER Division of Physical Ed Rec

### 1c. Department
HPER

### 2. Course Prefix
PEP

### 3. Course Number
A217

### 4. Previous Course Prefix & Number

### 5a. Credits/CEU
2 credit

### 5b. Contact Hours
(Lecture + Lab)
(1+2)

### 6. Complete Course/Program Title
Techniques in Personal Training II

### 7. Type of Course

<table>
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<th>Academic</th>
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<th>CEU</th>
<th>Professional Development</th>
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### 8. Type of Action

- [x] Course

### 9. Repeat Status No

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### 10. Grading Basis

- [x] A-F
- [ ] P/NP
- [ ] NG

### 11. Implementation Date

From: Spring/2010 To: /9999

### 12. Cross Listed with

<table>
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### 13. List any programs or college requirements that require this course
Selective for an Occupational Endorsement and for a minor in Health & Fitness Leadership.

### 14. Coordinate with Affected Units

UAA list serve

<table>
<thead>
<tr>
<th>Department, School, or College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiator Signature</td>
</tr>
</tbody>
</table>

### 15. General Education Requirement

- [ ] Oral Communication
- [ ] Written Communication
- [ ] Quantitative Skills
- [ ] Humanities
- [ ] Fine Arts
- [ ] Social Sciences
- [ ] Natural Sciences
- [ ] Integrative Capstone

### 16. Course Description
Examine a wide range of issues related to exerciser's varied needs. Presents techniques for exercise program planning, implementation and progression for general and special populations. Conducted in a classroom and lab setting for hands-on experience.

### 17a. Course Prerequisite(s) (list prefix and number)
PEP A117, PEP A215

### 17b. Test Score(s)
NA

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

### 17d. Other Restriction(s)

- College
- Major
- Class
- Level

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

### 18. Mark if course has fees

### 19. Justification for Action
The contents of this course are being combined with another course so this course should be deleted.
## Curriculum Action Request

**University of Alaska Anchorage**

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

<table>
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<th>1c. Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT CTC</td>
<td>APER Division of Physical Ed Rec</td>
<td>HPER</td>
</tr>
</tbody>
</table>

<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</th>
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</thead>
<tbody>
<tr>
<td>PEP</td>
<td>A218</td>
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<td>2 credit</td>
<td>(Lecture + Lab) (1+2)</td>
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### 6. Complete Course/Program Title

**Techniques in Aqua Fitness Instruction**

**Abbreviated Title for Transcript (30 character)**

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

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

<table>
<thead>
<tr>
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<th># of Repeats</th>
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| 10. Grading Basis |  | A-F | [ ] P/NP | [ ] NG |

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<th>11. Implementation Date</th>
<th>semester/year</th>
<th>From:</th>
<th>To:</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Spring/2010</td>
<td>/999</td>
</tr>
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</table>

| 12. | Cross Listed with | NA |
|     | Stacked with | NA |

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

- Selective for an Occupational Endorsement and for a minor in Health & Fitness Leadership.

### 14. Coordinate with Affected Units:
- UAA list serve
- 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

Examines special considerations for safely instructing an aqua fitness program. Presents principles of exercise in water, pool safety, deck versus water instruction, requirements of a water exercise instructor, designing a water exercise class, and use of equipment. Conducted in a classroom and lab setting for hands-on experience.

### 17. Course Prerequisite(s)

- [ ] Course Prerequisite(s) (list prefix and number)
  - PEP A215

- [ ] Test Score(s)
  - NA

- [ ] Co-requisite(s) (concurrent enrollment required)
  - NA

### 18. Mark if course has fees

### 19. Justification for Action

This course does not meet industry needs and therefore has never been offered because students are not requesting the course.
# Course Information

<table>
<thead>
<tr>
<th>1a. School or College</th>
<th>HW CHSW</th>
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<tbody>
<tr>
<td>1b. Division</td>
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<tr>
<td>1c. Department</td>
<td>Justice Center</td>
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<tr>
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<th>JUST</th>
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<tbody>
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<tr>
<td>4. Previous Course Prefix &amp; Number</td>
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<tr>
<td>5a. Credits/CEU</td>
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<td>(3+0)</td>
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| 6. Complete Course/Program Title |
| Development of Law |

| Abbreviated Title for Transcript (30 character) |

<table>
<thead>
<tr>
<th>7. Type of Course</th>
<th>Academic</th>
<th>Non-credit</th>
<th>CEU</th>
<th>Professional Development</th>
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<table>
<thead>
<tr>
<th>8. Type of Action</th>
<th>Add</th>
<th>Change</th>
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<table>
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<tr>
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| 13. List any programs or college requirements that require this course |
| Required for the B.A. in Justice; Elective for the Minor in Justice; Required for the B.A. in Philosophy (Law Track) |

<table>
<thead>
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| 16. Course Description |
| Examines the philosophy and development of law in the U.S. and Alaska. Explores constitutional history, the law of group status, and concepts of distributive justice. |

<table>
<thead>
<tr>
<th>17a. Course Prerequisite(s) (list prefix and number)</th>
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| 18. Mark if course has fees | N/A |

| 19. Justification for Action |
| Updating course content guide and course description |

---

Initiator (faculty only) | Date

Initiator (TYPE NAME) | Date

Approved
Disapproved:

Department Chairperson | Date

Approved
Disapproved:

Curriculum Committee Chairperson | Date

Approved
Disapproved:

Provost or Designee | Date
I. **Initiation Date:** April 2009

II. **Course Information**

A. **College:** College of Health and Social Welfare
B. **Course Subject/Number:** JUST A250
C. **Course Title:** Development of Law
D. **Credit Hours:** 3
E. **Contact Hours:** 3 + 0
F. **Grading Basis:** A-F
G. **Implementation Date:** Fall/2010
H. **Course Description:** Examines the philosophy and development of law in the U.S. and Alaska. Explores constitutional history, the law of group status, and concepts of distributive justice.
I. **Course Prerequisites:** JUST A110
J. **Test Scores:** N/A
K. **Co-requisites:** None
L. **Registration Restrictions:** None
M. **Course Fee:** No

III. **Instructional Goals and Student Outcomes**

A. The instructor will:
   1. Provide required and supplemental course readings, video clips, and audio recordings surveying and critiquing the foundations, social context, and effect of developments in American constitutional and substantive law.
   2. Provide in-class presentations and critiques of eras of legal development in the United States and Alaska, including discussion of the underlying social, political, and economic context, and incorporating relevant examples of contemporary lawmaking.
   3. Facilitate student discussions and critical thinking about the social, economic, and political context of legal development, and the role of law in social control and economic condition.
   4. Introduce students to the primary historical legal documents located in the National Archives and to the role of primary historical documents in researching the development of the law.
   5. Provide guidance in evaluating and locating authoritative secondary research materials relevant to the development of law.

B. **Student outcomes and assessment measures:**

<table>
<thead>
<tr>
<th><strong>Student Outcomes:</strong> Students will:</th>
<th><strong>Assessment Measures May Include:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehend the historic distinction between common law and civil law systems, and the significance of our common law heritage in American legal development.</td>
<td>Examinations, class or small group discussion, informal reflective writings.</td>
</tr>
</tbody>
</table>
### Student Outcomes: Students will:

| **Recognize the inherent tension between judicial and legislative lawmaking in the United States.** | **Assessment Measures May Include:** Examinations, class or small group discussion, informal reflective writings. |
| **Identify the role of social, economic, and political conditions on lawmaking and implementation of the law, and the impact of legal change on individual and collective values and behaviors and economic and social status.** | **Assessment Measures May Include:** Examinations, class or small group discussion, informal reflective writings, Blackboard Discussion Board, term paper and oral presentation. |
| **Compare significant eras of American constitutional development and historically important U.S. Supreme Court decisions.** | **Assessment Measures May Include:** Examinations, class or small group discussion, informal reflective writings, Blackboard Discussion Board, term paper and oral presentation. |
| **Compare significant eras of legislative and judicial lawmaking and historically important legislation and judicial decisions.** | **Assessment Measures May Include:** Examinations, class or small group discussion, informal reflective writings, Blackboard Discussion Board, term paper and oral presentation. |
| **Develop an analytic foundation on which to evaluate contemporary legal issues.** | **Assessment Measures May Include:** Examinations, class or small group discussion, informal reflective writings, Blackboard Discussion Board, term paper and oral presentation. |
| **Distinguish between primary and secondary research resources, evaluate secondary resources, and integrate and credit scholarly authorities in their writing.** | **Assessment Measures May Include:** Research paper, oral presentation. |

### IV. Course Level Justification

This course builds upon the concepts and vocabulary acquired by students in the prerequisite course, Justice 110 (Introduction to Justice). Course readings and lectures presuppose that students possess a basic understanding of legal terms and concepts of federalism, separation of powers, and due process. Students are required to draw connections between social conditions and legal development and to think critically about the same, using basic legal concepts as a foundation for their analysis.

### V. Topical Course Outline

I. **Introduction to American Legal System and Periods of American Law**
   a. Comparative legal traditions: civil law and common law
   b. English legal heritage and Magna Charta
   c. Structural institutions of American law

II. **The Beginnings of American Law: Colonial Law through the Constitutional Era**
   a. Colonial law
i. Reception of English common law
ii. The codification movement
iii. Law and colonial society
   1. Morality and colonial law
   2. Women’s rights, marriage, and coverture
   3. Children and the law of apprenticeship
   4. White indentured servitude
   5. Slavery
   6. Law of poverty
   7. Class legislation and sumptuary laws
   8. Economic regulation
   9. Colonial criminal law
b. Constitutional development
   i. English constitutional ideals
   ii. The Declaration of Independence and compact theory
   iii. Articles of Confederation
   iv. State constitutional development
   v. Constitution of 1787
c. Public law in the new republic
   i. The Bill of Rights
   ii. Courts and judges in the new nation
      1. Federalism
      2. Natural law and judicial review
III. The Golden Age of American Law: 1800 through the Civil War Era
a. Law and the mixed economy in ante-bellum America
   i. Federal commerce power
   ii. State constitutions and legislative promotion of the economy
   iii. Substantive law and economic growth
      1. Law of corporations
      2. Labor law
      3. Property law and eminent domain
      4. Contract law
      5. Tort law
b. Race and the nineteenth century law of personal / group status
   i. Slavery, the civil war, and institutionalized segregation of African-Americans
   ii. Law governing Native Americans and land acquisition
   iii. Asians and development of regional law
c. Law governing gender and domestic relations
   i. Women’s rights
   ii. Marriage and divorce
   iii. Birth control and abortion
d. The nineteenth century criminal justice system
   i. Exploration of causes of crime
   ii. Excuse of crime: insanity and self-defense
   iii. Late nineteenth century crime and morality
IV. The Formal Period of American Law: The Civil War Era to World War I
a. Labor, industrialization, and the rise of the regulatory state
   i. State regulation and the public interest
ii. Federal regulation and the public interest
b. Judicial response to industrialization and the regulatory state
   i. Substantive due process
   ii. State police power
   iii. Federal police power and labor
   iv. Liberty of contract
V. Modernization of Legal Culture: World War I and Post-war America
   a. Modern legal culture, the Depression, and the World Wars
      i. World War I and civil liberties
      ii. Political radicals and civil liberties
      iii. World War II and civil liberties
         1. The flag salute cases
         2. The Japanese internment
      iv. Civil liberties and criminal justice in times of crisis
       v. Civil rights and racial justice
          1. Race and voting rights
          2. Race and education
          3. Race and criminal justice
      vi. The New Deal and the rise of legal liberalism
          1. The Supreme Court and the New Deal
          2. The retreat from economic substantive due process
          3. Preferred positions and selective incorporation of the Bill of Rights against the states
   b. Rights, liberty, and science in modern America
      i. Equal protection
         1. The civil rights movement and civil rights acts of the 1960’s
         2. Affirmative action
      ii. Privacy
         1. Birth control and abortion
         2. Sexual orientation and same-sex marriage
      iii. Civil liberties and speech
         1. Speech and national security
         2. Regulation of obscenity
      iv. Criminal justice in modern American
      v. Science and the law
   c. Law and the economy in modern America
      i. Contract law and consumer protection
      ii. Torts and strict liability
      iii. Property law, eminent domain, zoning, and regulatory takings
      iv. Residential leases
      v. Government benefits and entitlements
   d. Law, politics, and terror
      i. The modern presidency and separation of powers
      ii. Political questions and the presidential election of 2000
      iii. The USA Patriot Act and Homeland Security
VI. **Suggested Texts**


VII. **Bibliography**


<table>
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<tr>
<th>1a. School or College</th>
<th>AS CAS</th>
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<td>Co-requisites</td>
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13. List any programs or college requirements that require this course
Elective capstone course for BA-Biological Sciences, BS-Biological Sciences majors, Biology minors, BS-Geology or BS-Natural Science majors.

14. Coordinate with Affected Units: UAA Faculty ListServ, UAA Deans & Directors.
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
A comprehensive examination of the possibility of the existence of life (microbial and advanced) outside of the Earth (star and planet formation rates, habitability zones, origin of life, evolution, and formation of intelligence), the probability of discovery of extraterrestrial life (methods of planet detection, chemical signatures of microbial life, and contact with advanced life), and the scientific and cultural implications of such a discovery.

17a. Course Prerequisite(s) (list prefix and number) BIOL A115 and PHYS A123
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) Junior standing; completion of all GER Tier 1 courses is required.

18. Mark if course has fees

19. Justification for Action
New UAA GER Integrative Capstone course. The advanced approach to understanding of extraterrestrial life requires an integration of critical concepts of astrophysics, physics, geology, atmospheric science, origin of life, molecular biology, and evolutionary biology. Students will emerge with an understanding of how life originates and evolves, what conditions are necessary for life to exist elsewhere, how we may discover it, and what it would mean to humankind.
I. Implementation Date: Spring 2010

II. Course Information
A. College: College of Arts and Sciences
B. Course Subject/Number: BIOL A365
C. Course Title: Astrobiology
D. Course Description: A comprehensive examination of the possibility of the existence of life (microbial and advanced) outside of the Earth (star and planet formation rates, habitability zones, origin of life, evolution, and formation of intelligence), the probability of discovery of extraterrestrial life (methods of planet detection, chemical signatures of microbial life, and contact with advanced life), and the scientific and cultural implications of such a discovery.

E. Credit Hours: 3.0
F. Contact Hours: 3 + 0
G. Grading Basis: A-F
H. Status of Course Relative to Degree Program: Elective capstone course for BA-Biological Sciences, BS-Biological Sciences majors, Biology minors, BS-Geology or BS-Natural Science majors.

I. Course Fees (Yes/No): Yes
J. Lab Fees (Yes/No): No
K. Coordination: UAA Faculty Listserv, UAA Deans and Directors.
L. Prerequisites/Corequisite: Prerequisites: BIOL A115 and PHYS A123.
M. Registration Restrictions: Junior standing; completion of all GER Tier 1 courses (basic college-level skills) is required for GER Tier 3 credit.

N. Course Attributes: UAA GER Integrative Capstone

III. Course Activities:
This is primarily a lecture course; however it will use the visualization tools and immersive video environment of the CPISB planetarium. Students are required to read, research and synthesize information from the primary literature and other resources to cover a topic of their choice related to the likelihood of life on another planet, the chances of discovery of extraterrestrial life, or the impact that such a discovery would have on society. This research will be presented by the students to the class.

IV. Evaluation:
Course grading is A-F. The evaluation methods, while at the discretion of the faculty member teaching the course, may include written lecture exams, worksheets and other homework assignments, reading and interpreting selected primary literature and a research project with an associated paper in scientific format.
V. Course Level Justification:
Students are required to learn and integrate information from a variety of scientific disciplines as it relates to astrobiology, to read, understand, and apply ideas conveyed by primary scientific literature, to synthesize astrophysical, chemical, geological and biological knowledge and social considerations; and to apply course materials to this topic.

GER Integrative Capstone Justification:
Justifications for designating BIOL A365 Astrobiology as a GER Integrative Capstone course include its emphases on:

1. Knowledge Integration / Interrelationships and synergy among GER disciplines: Astrobiology’s relationship to the other natural and social sciences is an overall theme of the course. This course focuses on the interfaces between physical sciences (astronomy, chemistry, physics, geology), biological sciences (molecular biology, origins of life, evolutionary biology), and the social sciences, particularly as they relate to the implications of the discovery of extraterrestrial life.

2. Effective communication skills: Student success demands effective communication through essay examinations, individual classroom presentations, brief reports (oral and written) on hot topics from the local media, and a final research paper.

3. Critical Thinking: Students will succeed in this class if they are able to integrate information across disciplines, and critically evaluate the reliability of data and positions presented in lecture, texts, scientific, and popular viewpoints. Students' ability to critically evaluate diverse materials will be determined based on writing assignments, class presentations, and exams.

4. Information literacy: Students are expected to achieve and demonstrate computer and Internet skills for acquiring information relevant to current topics in astrobiology. This will involve both research in the primary scientific literature (via library and internet resources) and the collection of information from more 'public' sources such as TV, Web, popular press magazines and newspapers, and advocacy organizations. Students must show that they can critically and appropriately evaluate scientific content in 'public' sources based on knowledge gleaned from 'scientific' sources.

5. Quantitative Perspectives: A critical understanding of astrobiology requires that students grasp quantitative concepts such as how a star's mass affects the size and longevity of a habitability zone, and how cell size affects metabolic and reproductive rates. In addition, students must be able to read and interpret scientific graphs (quantitative data, graphically displayed), and to generate graphs showing the relationship between different properties (such as the temperature and luminosity of a star). Exams will specifically test on these skills.

6. Evolving realities of the 21st Century: The growing knowledge that understanding the possibility and probability of life on another planet is to understand how life originated on ours. It creates a special perspective on the uniqueness of life on Earth, and its fragility. This is particularly relevant in the context that humans are having large and potentially irreversible impacts on the habitability of the Earth for many forms of life, which has been a recent focus of scientific and political discussions.
## Course Outline

1.0 An Introduction to Life in the Universe
   1.1 The Possibilities of Life Beyond Earth
   1.2 The Scientific Context of the Search
   1.3 The New Science of Astrobiology

2.0 The Habitability of the Earth
   2.1 Geology and Life
   2.2 Habitability
   2.3 Climate Regulation and Change

3.0 The Nature of Life on Earth
   3.1 Defining Life
   3.2 Cells: The Basic Units of Life
   3.3 Metabolism
   3.4 DNA and Heritability

4.0 Origin and Evolution of Life on Earth
   4.1 Searching for the Origin of Life
   4.2 The Evolution of Life
   4.3 Impacts and Extinctions

5.0 Life in the Solar System
   5.1 The Inner Solar System
   5.2 The Outer Solar System
   5.3 Spacecraft and Exploration

6.0 Mars
   6.1 Fantasies of Martian Civilization
   6.2 A Modern Portrait of Mars
   6.3 The Climate History of Mars
   6.4 Searching for Life on Mars

7.0 The Jovian Moons
   7.1 Life on the Galilean Moons
   7.2 Life on Saturn and Beyond

8.0 The Nature and Evolution of Habitability
   8.1 The Concept of a Habitable Zone
   8.2 Venus and Mars: Examples in Potential Habitability
   8.3 The Future of Life on Earth
   8.4 Global Warming

9.0 Habitability Outside the Solar System
   9.1 Extrasolar Planets
   9.2 Stellar Classification
   9.3 Rare Earth?

10.0 The Search for Extraterrestrial Intelligence
   10.1 The Drake Equation
   10.2 The Question of Intelligence
   10.3 Searching for Intelligence

11.0 Interstellar Travel
   11.1 The Challenge of Interstellar Travel
   11.2 Building a Spaceship for Interstellar Travel
   11.3 Fermi's Paradox
VII. Instructional Goals and Student Outcomes:
A. The instructor will:
The instructor will:
• Provide a basic description of the physical, chemical, and geological properties necessary for the origin and sustainability of life on Earth.
• Build on this conceptual framework to describe how other moon, planet and star systems have zones of habitability in which life can exist.
• Discuss the physical features of other worlds within our Solar System and beyond which may allow life to develop.
• Describe how life evolves in tandem with its changing environment. Provide detailed examples of how the physiological traits of organisms are uniquely linked to their habitat, and of how changes in that habitat may influence species diversity and abundance through impacts on physiological properties.
• Discuss the techniques used to search for extraterrestrial planets on which life could exist. Explore future missions and technologies that will search for the chemical signatures of simple life forms on these worlds.
• Discuss the role of intelligence in the evolution of life, and its implications for the likelihood of advanced extraterrestrial life forms capable of communicating with us.
• Examine the techniques used to search for advanced life in the Universe, and explore the scientific and cultural implications of such a discovery.
• Teach students how to evaluate and integrate information from a variety of different sources and perspectives.

B. Student Outcomes:

<table>
<thead>
<tr>
<th>Students will be able to:</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulate in depth the processes of the origins and evolution of life in different ecosystems. Conceptually link the chemistry and physiology of living organisms with the physical and biological aspects of their environment.</td>
<td>Exams and written assignments</td>
</tr>
<tr>
<td>Critically integrate information read from scientific articles provided in lecture and textbook assignments, and apply this information to evaluate the scientific accuracy of popular press (TV, newspaper, magazine, web) reports related to astrobiology.</td>
<td>Exams, written assignments and in-class reports</td>
</tr>
<tr>
<td>Effectively describe the likelihood of &quot;contact&quot; with an advanced civilization, and discuss the scientific and cultural impacts of such a discovery.</td>
<td>In-class presentations, exams, and writing assignments</td>
</tr>
<tr>
<td>Assess the long-term prospects for the habitability for life of the Earth. In particular, explore the nature of human impacts on ecosystems through in depth study of current 'hot topics' such as global warming.</td>
<td>In-class presentations, exams, and written assignments</td>
</tr>
</tbody>
</table>

VIII. Suggested Text(s):
IX. Bibliography:
In addition to textbook assignments, an extensive reference list of current literature from scientific journals is utilized for this course and assigned and / or suggested to the students (all provided on blackboard); please contact Travis Rector, aftar, or 6-1242.


### 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>
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<td>AMSC Division of Math Science</td>
<td>Physics and Astronomy</td>
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<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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<td>(3+0)</td>
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6. **Complete Course/Program Title**

**Astrobiology**

Abbreviated Title for Transcript (30 character)

7. **Type of Course**

- Academic
- Non-credit
- CEU
- Professional Development

<table>
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<th>8. Type of Action</th>
<th>9. Repeat Status No</th>
<th># of Repeats</th>
<th>Max Credits</th>
<th>10. Grading Basis</th>
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<td>A-F</td>
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11. **Implementation Date**

From: Spring/2010  To: /9999

12. **Cross Listed with**

BIOL A365

13. **List any programs or college requirements that require this course**

Elective capstone course for BA-Biological Sciences, BS-Biological Sciences majors, Biology minors, BS-Geology or BS-Natural Science majors.

14. **Coordinate with Affected Units:**

UAA Faculty ListServ, UAA Deans & Directors.

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<th>15. General Education Requirement</th>
<th>16. Course Description</th>
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<td>A comprehensive examination of the possibility of the existence of life (microbial and advanced) outside of the Earth (star and planet formation rates, habitability zones, origin of life, evolution, and formation of intelligence), the probability of discovery of extraterrestrial life (methods of planet detection, chemical signatures of microbial life, and contact with advanced life), and the scientific and cultural implications of such a discovery.</td>
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17a. **Course Prerequisite(s)**

BIOL A115 and PHYS A123

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<th>17b. Test Score(s)</th>
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17d. **Other Restriction(s)**

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<td>Junior standing; completion of all GER Tier 1 courses is required.</td>
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18. **Mark if course has fees**

<table>
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<th>19. Justification for Action</th>
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UNIVERSITY OF ALASKA ANCHORAGE
COURSE CONTENT GUIDE

I. Implementation Date: Spring 2010

II. Course Information
A. College: College of Arts and Sciences
B. Course Subject/Number: ASTR A365
C. Course Title: Astrobiology
D. Course Description: A comprehensive examination of the possibility of the existence of life (microbial and advanced) outside of the Earth (star and planet formation rates, habitability zones, origin of life, evolution, and formation of intelligence), the probability of discovery of extraterrestrial life (methods of planet detection, chemical signatures of microbial life, and contact with advanced life), and the scientific and cultural implications of such a discovery.
E. Credit Hours: 3.0
F. Contact Hours: 3 + 0
G. Grading Basis: A-F
H. Status of Course Relative to Degree Program: Elective capstone course for BA-Biological Sciences, BS-Biological Sciences majors, Biology minors, BS-Geology or BS-Natural Science majors.
I. Course Fees (Yes/No): Yes
J. Lab Fees (Yes/No): No
K. Coordination: UAA Faculty Listserv, UAA Deans and Directors.
L. Prerequisites/Corequisite: Prerequisites: BIOL A115 and PHYS A123.
M. Registration Restrictions: Junior standing; completion of all GER Tier 1 courses (basic college-level skills) is required for GER Tier 3 credit.
N. Course Attributes: UAA GER Integrative Capstone

III. Course Activities:
This is primarily a lecture course; however it will use the visualization tools and immersive video environment of the CPISB planetarium. Students are required to read, research and synthesize information from the primary literature and other resources to cover a topic of their choice related to the likelihood of life on another planet, the chances of discovery of extraterrestrial life, or the impact that such a discovery would have on society. This research will be presented by the students to the class.

IV. Evaluation:
Course grading is A-F. The evaluation methods, while at the discretion of the faculty member teaching the course, may include written lecture exams, worksheets and other homework assignments, reading and interpreting selected primary literature and a research project with an associated paper in scientific format.
V. **Course Level Justification:**
Students are required to learn and integrate information from a variety of scientific disciplines as it relates to astrobiology, to read, understand, and apply ideas conveyed by primary scientific literature, to synthesize astrophysical, chemical, geological and biological knowledge and social considerations; and to apply course materials to this topic.

**GER Integrative Capstone Justification:**
Justifications for designating ASTR A365 Astrobiology as a GER Integrative Capstone course include its emphases on:

1. **Knowledge Integration / Interrelationships and synergy among GER disciplines:** Astrobiology’s relationship to the other natural and social sciences is an overall theme of the course. This course focuses on the interfaces between physical sciences (astronomy, chemistry, physics, geology), biological sciences (molecular biology, origins of life, evolutionary biology), and the social sciences, particularly as they relate to the implications of the discovery of extraterrestrial life.

2. **Effective communication skills:** Student success demands effective communication through essay examinations, individual classroom presentations, brief reports (oral and written) on hot topics from the local media, and a final research paper.

3. **Critical Thinking:** Students will succeed in this class if they are able to integrate information across disciplines, and critically evaluate the reliability of data and positions presented in lecture, texts, scientific, and popular viewpoints. Students' ability to critically evaluate diverse materials will be determined based on writing assignments, class presentations, and exams.

4. **Information literacy:** Students are expected to achieve and demonstrate computer and Internet skills for acquiring information relevant to current topics in astrobiology. This will involve both research in the primary scientific literature (via library and internet resources) and the collection of information from more 'public' sources such as TV, Web, popular press magazines and newspapers, and advocacy organizations. Students must show that they can critically and appropriately evaluate scientific content in 'public' sources based on knowledge gleaned from 'scientific' sources.

5. **Quantitative Perspectives:** A critical understanding of astrobiology requires that students grasp quantitative concepts such as how a star's mass affects the size and longevity of a habitability zone, and how cell size affects metabolic and reproductive rates. In addition, students must be able to read and interpret scientific graphs (quantitative data, graphically displayed), and to generate graphs showing the relationship between different properties (such as the temperature and luminosity of a star). Exams will specifically test on these skills.

6. **Evolving realities of the 21st Century:** The growing knowledge that understanding the possibility and probability of life on another planet is to understand how life originated on ours. It creates a special perspective on the uniqueness of life on Earth, and its fragility. This is particularly relevant in the context that humans are having large and potentially irreversible impacts on the habitability of the Earth for many forms of life, which has been a recent focus of scientific and political discussions.
VI. Course Outline

1.0 An Introduction to Life in the Universe
   1.1 The Possibilities of Life Beyond Earth
   1.2 The Scientific Context of the Search
   1.3 The New Science of Astrobiology

2.0 The Habitability of the Earth
   2.1 Geology and Life
   2.2 Habitability
   2.3 Climate Regulation and Change

3.0 The Nature of Life on Earth
   3.1 Defining Life
   3.2 Cells: The Basic Units of Life
   3.3 Metabolism
   3.4 DNA and Heritability

4.0 Origin and Evolution of Life on Earth
   4.1 Searching for the Origin of Life
   4.2 The Evolution of Life
   4.3 Impacts and Extinctions

5.0 Life in the Solar System
   5.1 The Inner Solar System
   5.2 The Outer Solar System
   5.3 Spacecraft and Exploration

6.0 Mars
   6.1 Fantasies of Martian Civilization
   6.2 A Modern Portrait of Mars
   6.3 The Climate History of Mars
   6.4 Searching for Life on Mars

7.0 The Jovian Moons
   7.1 Life on the Galilean Moons
   7.2 Life on Saturn and Beyond

8.0 The Nature and Evolution of Habitability
   8.1 The Concept of a Habitable Zone
   8.2 Venus and Mars: Examples in Potential Habitability
   8.3 The Future of Life on Earth
   8.4 Global Warming

9.0 Habitability Outside the Solar System
   9.1 Extrasolar Planets
   9.2 Stellar Classification
   9.3 Rare Earth?

10.0 The Search for Extraterrestrial Intelligence
    10.1 The Drake Equation
    10.2 The Question of Intelligence
    10.3 Searching for Intelligence

11.0 Interstellar Travel
    11.1 The Challenge of Interstellar Travel
    11.2 Building a Spaceship for Interstellar Travel
    11.3 Fermi's Paradox
VII. Instructional Goals and Student Outcomes:

A. The instructor will:

The instructor will:

• Provide a basic description of the physical, chemical, and geological properties necessary for the origin and sustainability of life on Earth.
• Build on this conceptual framework to describe how other moon, planet and star systems have zones of habitability in which life can exist.
• Discuss the physical features of other worlds within our Solar System and beyond which may allow life to develop.
• Describe how life evolves in tandem with its changing environment. Provide detailed examples of how the physiological traits of organisms are uniquely linked to their habitat, and of how changes in that habitat may influence species diversity and abundance through impacts on physiological properties.
• Discuss the techniques used to search for extraterrestrial planets on which life could exist. Explore future missions and technologies that will search for the chemical signatures of simple life forms on these worlds.
• Discuss the role of intelligence in the evolution of life, and its implications for the likelihood of advanced extraterrestrial life forms capable of communicating with us.
• Examine the techniques used to search for advanced life in the Universe, and explore the scientific and cultural implications of such a discovery.
• Teach students how to evaluate and integrate information from a variety of different sources and perspectives.

B. Student Outcomes:

<table>
<thead>
<tr>
<th>Students will be able to:</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulate in depth the processes of the origins and evolution of life in different ecosystems. Conceptually link the chemistry and physiology of living organisms with the physical and biological aspects of their environment.</td>
<td>Exams and written assignments</td>
</tr>
<tr>
<td>Critically integrate information read from scientific articles provided in lecture and textbook assignments, and apply this information to evaluate the scientific accuracy of popular press (TV, newspaper, magazine, web) reports related to astrobiology.</td>
<td>Exams, written assignments and in-class reports</td>
</tr>
<tr>
<td>Effectively describe the likelihood of &quot;contact&quot; with an advanced civilization, and discuss the scientific and cultural impacts of such a discovery.</td>
<td>In-class presentations, exams, and writing assignments</td>
</tr>
<tr>
<td>Assess the long-term prospects for the habitability for life of the Earth. In particular, explore the nature of human impacts on ecosystems through in depth study of current 'hot topics' such as global warming.</td>
<td>In-class presentations, exams, and written assignments.</td>
</tr>
</tbody>
</table>

VIII. Suggested Text(s):

IX. Bibliography:
In addition to textbook assignments, an extensive reference list of current literature from scientific journals is utilized for this course and assigned and / or suggested to the students (all provided on blackboard); please contact Travis Rector, after, or 6-1242.


### 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>HW CHSW</td>
<td>ADSN</td>
<td>SNHS</td>
</tr>
</tbody>
</table>

<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>
</tr>
</thead>
<tbody>
<tr>
<td>NS</td>
<td>A439</td>
<td>N/A</td>
<td>3</td>
<td>(3+0)</td>
</tr>
</tbody>
</table>

#### 6. Complete Course/Program Title

**Spirituality in Nursing**

*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

#### 10. Grading Basis

- [ ] A-F
- [ ] P/NP
- [ ] NG

#### 11. Implementation Date

- From: Spring/2010
- To: 9999

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

- Elective

#### 14. Coordinate with Affected Units

- Faculty Listserv
  - 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

Describes the philosophical, historical, and cultural influences on spiritual development through the lifespan. Examines the nurse’s role in applying the nursing process to meet the spiritual needs of clients during illness and health. Identifies models and research findings applicable to spiritual care.

#### 17a. Course Prerequisite(s) (list prefix and number)

NS A300 with C or better

#### 17b. Test Score(s)

N/A

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

None

#### 17d. Other Restriction(s)

- [ ] College
- [x] Major
- [ ] Class
- [ ] Level

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

Nursing major or instructor permission

#### 18. Mark if course has fees $15.00 to support AV needs

- [x] Yes

#### 19. Justification for Action

Expands alternatives of nursing electives that deal with a holistic approach to client care.
Course Content Guide
School of Nursing
Bachelor of Science, Nursing Science

I. Date of Initiation: April, 2009

II. Course Information
A. College: HW CHSW
B. Course Subject: NS
C. Course Number: A439
D. Number of course Credits: 3
E. Contact Hours: (3+0)
F. Course Program: Bachelor of Science, Nursing Science
G. Course Title: Spirituality in Nursing
H. Grade Basis: A-F
I. Implementation Date: Spring, 2010
J. Course Description: Describes the philosophical, historical, and cultural influences on spiritual development through the lifespan. Examines the nurse’s role in applying the nursing process to meet the spiritual needs of clients during illness and health. Identifies models and research findings applicable to spiritual care.
K. Course Prerequisites: NS A300 with grade of C or better
L. Course Co-requisites: None
M. Registration Restrictions: Nursing major or instructor permission
N. Course Fee: Yes

III. Course Instructional Strategies:
Lectures, class discussions, client interviews, written assignments

IV. Instructional Goals:
A. To provide students with an understanding of spiritual development through the life span.
B. To offer students opportunities to apply the nursing process to help clients meet their spiritual needs.
C. To assist students in reviewing research related to spirituality and holistic care.
D. To introduce students to models for meeting clients’ spiritual needs.
## V. Student Outcomes

<table>
<thead>
<tr>
<th>Student Outcomes</th>
<th>Outcome Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the completion of this course, students will be able to:</td>
<td>As measured by:</td>
</tr>
<tr>
<td>1. Formulate a personal definition of spirituality.</td>
<td>Discussion, reflection paper</td>
</tr>
<tr>
<td>2. Describe the history of spirituality in nursing.</td>
<td>Discussion, exam</td>
</tr>
<tr>
<td>3. Describe spirituality development across the lifespan.</td>
<td>Discussion, exam, reflection paper</td>
</tr>
<tr>
<td>4. Discuss the implications of spirituality in maintaining health.</td>
<td>Discussion, exam</td>
</tr>
<tr>
<td>5. Assess client’s spirituality using a variety of tools.</td>
<td>Nursing process paper</td>
</tr>
<tr>
<td>6. Compare and contrast various nursing interventions to meet spiritual needs of clients throughout the life span.</td>
<td>Presentation, nursing process paper</td>
</tr>
<tr>
<td>7. Compare and contrast conceptual/theoretical frameworks/models of spirituality.</td>
<td>Presentation and paper about model</td>
</tr>
<tr>
<td>8. Describe research findings related to spirituality in nursing practice.</td>
<td>Presentation</td>
</tr>
<tr>
<td>9. Analyze philosophical, historical, and professional aspects of faith community nursing models.</td>
<td>Exam</td>
</tr>
</tbody>
</table>

## VI. Course Level Justification:
Builds on the foundational content learned in NS300. Provides nursing students an opportunity to study the development of spirituality throughout the life span and factors that influence spirituality of clients.

## VII. Topical Course Outline:

### 1.0 Foundation of spirituality
- 1.1 Philosophical approaches to spirituality
- 1.2 Cultural influences on spirituality
- 1.3 History of spirituality in nursing
- 1.4 Models of spirituality
  - 1.2.1 Caring
  - 1.2.2 Suffering
  - 1.2.3 Holistic nursing - Mind-body-spirit

### 2.0 Development of spirituality through the life span

### 3.0 Nurse’s role in spiritual care
- 3.1 Role of spirituality in health maintenance
- 3.2 Spiritual needs of acutely ill clients
- 3.3 Spiritual needs of chronically ill clients
- 3.4 Spiritual needs of children and family clients
- 3.5 Spiritual needs of older adult clients
- 3.6 Spiritual needs in death and bereavement

### 4.0 Role of faith community nursing
- 4.1 Models of faith community nursing
- 4.2 The spirituality of faith community nursing
5.0 Research related to spirituality

VII. Suggested Textbooks:

VIII. Selected Course Bibliography:


Date: April 26, 2009

From: M. Hilary Davies, UAB Chair


GOAL 1: Revise the Curriculum Handbook.
The Curriculum Handbook jointly revised by UAB and GAB was approved by the UAA Faculty Senate in April 2009.
There are a few issues that will need more review during the 2009-2010 academic year. They include:
1. Digital signatures for the CARs and PARs.
2. Is it permissible for a faculty member to sign the CAR/PAR in more than one capacity?
   If so, is there a limit to the number of lines that one faculty member can sign?
3. Distance Education information.
4. Clarification on who can present curriculum at UAB/GAB. Faculty member or faculty representative is understood. What if a person is tenured in a department but has a full-time administrative assignment?
5. Contact Hours. Examples do not seem to agree with the Summary.

GOAL 2: Determine UAB/GAB roles and procedures for ensuring sound academic quality of distance delivery courses.
At the request of UAB, ACDLIT reviewed definitions of Distance Education, and recommended that the definition of Distance Education conforming to NWCUU Guidelines be placed in the Curriculum Handbook.

GOAL 3: Develop closer coordination with the Office of Academic Affairs and the Office of the Registrar to review policies and procedures for their impacts on academics, to ensure that faculty input and review by UAB and GAB is automatic.
There has been excellent coordination between UAB and the Office of the Registrar this academic year. UAB has reviewed many academic policies brought to the Board by Registrar John Allred this year. They include: prerequisite checking; repeatability rules for transfer courses; approving that a memo can be used when a large number of courses in a prefix needs the statement “with minimum grade of C” added to the prerequisites when this statement is already in the program catalog copy; changing the rule so that a course number cannot be reused.; clarification that the permissible signatures on Blanket Petitions are the initiating faculty and the Department Chair; admission of transfer students (retain current policy); change of grade policy, and clarification of the guidelines for academic petitions.
There has been excellent coordination between UAB and the Office of Academic Affairs this academic year. UAB members participated in the Institutional Learning Outcomes Task Force, which completed its charge in April 2009.
GOAL 4: Develop a plan for curriculum updates.
The UAB Chair (Hilary Davies) and GAB Chair (Patt Sandberg) together with Tom Miller and Associate Vice Provost Bart Quimby developed a plan for updating curriculum. All faculty and Deans/Directors were informed of the plan early in the spring 2009 semester. The implementation is progressing well.

Other accomplishments:
Several chapters of the catalog are available in Word on the Governance website. This allows faculty to provide track-changed catalog copy to the academic boards.