

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500). See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/> for a complete description of the rules governing curriculum & course changes.

**TRIAL COURSE OR NEW COURSE PROPOSAL**  
(Attach copy of syllabus)

**SUBMITTED BY:**

<b>Department</b>	<b>Biology and Wildlife</b>	<b>College/School</b>	<b>CNSM</b>
<b>Prepared by</b>	<b>Anshul A Pandya</b>	<b>Phone</b>	<b>907-474-2748</b>
<b>Email Contact</b>	<b><u>aapandya@alaska.edu</u></b>	<b>Faculty Contact</b>	<b>Anshul A Pandya</b>

**1. ACTION DESIRED**  
(CHECK ONE):

Trial Course	<input checked="" type="checkbox"/>	New Course	<input type="checkbox"/>
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**2. COURSE IDENTIFICATION:**

Dept	<b>BIOL</b>	Course #	<b>194</b>	No. of Credits	<b>3</b>
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Justify upper/lower division status & number of credits:	<p><b>This course is intended for students who pursue an Associate of Science degree. This course does not require much background apart from basic math and English and therefore it is designated as a lower division (100 level) course.</b></p> <p><b>The topics and material covered in the course will require 2400 minutes of lecture time (plus 4800 minutes of study on part of the students) during a normal 14-week semester and therefore this course is for Three (3) credits.</b></p>
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**3. PROPOSED COURSE TITLE:** **BIOLOGY OF ADDICTION**

**4. To be CROSS LISTED?** No    If yes, Dept:     Course #

NOTE: Cross-listing requires approval of both departments and deans involved. Add lines at end of form for additional required signatures.

**5. To be STACKED?\*** No    If yes, Dept.     Course #

**How will the two course levels differ from each other? How will each be taught at the appropriate level?:**

\* Use only one Format 1 form for the stacked course (not one for each level of the course!) and attach syllabi. Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi (undergraduate and graduate versions) will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online - see URL at top of this page.

**6. FREQUENCY OF OFFERING:** **Every Fall Semester**

Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) – or As Demand Warrants

**7. SEMESTER & YEAR OF FIRST OFFERING**  
(Effective AY2015-16 if approved by 3/31/2015; otherwise AY2016-17)

**Fall 2017**

**8. COURSE FORMAT:**

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, **any core course compressed to less than six weeks must be approved by the Core Review Committee.**

COURSE FORMAT: (check all that apply)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input checked="" type="checkbox"/> 6 weeks to full semester
OTHER FORMAT (specify)						
Mode of delivery (specify lecture, field trips, labs, etc)	<b>This course will be offered asynchronously through UAF eLearning &amp; Distance Education via online lectures.</b>					

<b>9. CONTACT HOURS PER WEEK:</b>	<input type="text" value="3"/>	LECTURE hours/weeks	<input type="text" value="0"/>	LAB hours /week	<input type="text" value="0"/>	PRACTICUM hours /week
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Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/guidelines-for-computing-/> for more information on number of credits.

OTHER HOURS (specify type)	<input type="text"/>
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**10. COMPLETE CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):**

**Example of a complete description:**

**FISH F487 W, O Fisheries Management**  
**3 Credits Offered Spring**  
 Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. **Prerequisites: COMM F131X or COMM F141X; ENGL F111X; ENGL F211X or ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)**

<b>BIOL F194</b>	<b>Biology of Addiction</b>
<b>3 Credits</b>	<b>Offered Fall</b>
<p><b>This course covers various chemical substances of abuse and neurobiological mechanism of addiction. Functioning of the nervous system, actions of addictive drugs, ways of avoidance and treatment of addiction will be discussed. Information course only, should not be used for treatment or counseling in any form. May not be used as biology elective credit for a major in biological sciences. Note: Suitable for non-science majors and those seeking preliminary instruction before beginning study in health-related areas. Prerequisites: Placement in ENGL F111X or higher; placement in DEVM F105 or higher; or permission of instructor. (3+0).</b></p>	

**11. COURSE CLASSIFICATIONS:** Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

H = Humanities	<input type="text"/>	S = Social Sciences	<input type="text"/>
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Will this course be used to fulfill a requirement for the baccalaureate core? <b>If YES, attach form.</b>	<b>YES:</b>	<input type="text"/>	<b>NO:</b>	<input checked="" type="text" value="X"/>
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IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6	<input type="text"/>	W = Writing Intensive, Format 7	<input type="text"/>	X = Baccalaureate Core	<input type="text"/>
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**11.A Is course content related to northern, arctic or circumpolar studies?**

<b>YES</b>	<input type="text"/>
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12. COURSE REPEATABILITY:

Is this course repeatable for credit?	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
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If yes, fill out boxes below.

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).	<input type="text"/>
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How many times may the course be repeated for credit?	<input type="text"/>	TIMES
If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course?	<input type="text"/>	CREDITS
If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?	<input type="text"/>	CREDITS

13. GRADING SYSTEM: Specify only one. Note: Changing the grading system for a course later on constitutes a Major Course Change - Format 2 form.

LETTER:  PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES	Placement in ENGL F111X or higher; placement in DEVM F105 or higher; or permission of instructor.
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These will be required before the student is allowed to enroll in the course.

15. SPECIAL RESTRICTIONS, CONDITIONS	None
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16. PROPOSED COURSE FEES	<input type="text" value="\$0"/>
Has a memo been submitted through your dean to the Provost for fee approval?	<input type="text"/>
	Yes/No

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously?	<input type="text" value="No"/>
Yes/No	

If yes, give semester, year, course #, etc.:

18. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

Apart from the 3 credit workload of a faculty who will be teaching this course no impact on the budget or facilities is expected.
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19. LIBRARY COLLECTIONS

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	We do not anticipate the need of any special library/media collections, equipment and services for the proposed.
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20. IMPACTS ON PROGRAMS/DEPTS

What programs/departments will be affected by this proposed action? Include information on the Programs/Departments contacted (e.g., email, memo)

The proposed course will increase the choice of distant delivered courses for the students of the Associate of Science degree.
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**21. POSITIVE AND NEGATIVE IMPACTS**

Please specify **positive and negative** impacts on other courses, programs and departments resulting from the proposed action.

**Positive impact:** Students pursuing the Associate of Science degree will have more courses to choose from to complete their electives.

**Negative impact:** None expected.

**JUSTIFICATION FOR ACTION REQUESTED**

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

**It is known that drug abuse and alcoholism are a major health and social problem in communities across Alaska. This course is designed to teach the neurobiological mechanism by which the process of addiction to alcohol and pharmacological substances occurs. It is intended to highlight major pharmacological substances that have addictive liability. As such it will help young as well as mature students understand what happens in the human body in general and the human brain in particular during the process of addiction and informs them to stay away from addictive substances.**

**The course is suitable for non-science majors and those seeking preliminary instruction before beginning study in health-related areas. It is imperative that such a course be offered not only with an academic perspective but also with a social and community health perspective in mind.**

**In order to ensure that the quality of UAF education is not lowered the testing and evaluation of students taking the course will be rigorous and up to the highest standard.**

**Ultimately, the purpose of this course is the wider dissemination of knowledge, specially such knowledge that can improve lives by preventing a person from falling into the evil trap of addiction of any form.**

**APPROVALS: Add additional signature lines as needed.**

	Date	
Signature, Chair, Program/Department of:		

	Date	
Signature, Chair, College/School Curriculum Council for:		

	Date	
Signature, Dean, College/School of:		

**Offerings above the level of approved programs must be approved in advance by the Provost.**

	Date	
Signature of Provost (if above level of approved programs)		

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DocuSigned by: <i>Diane Wagner</i>		Date	December 7, 2016
Signature, Chair, Program/Department of:		Chair, undergraduate Biological Sciences program	

DocuSigned by: <i>Patricia Doak</i>		Date	December 8, 2016
Signature, Chair, College/School Curriculum Council for:		CNSM	

DocuSigned by: <i>Lee W. Leyer</i>		Date	December 9, 2016
Signature, Dean, College/School of:		CNSM	

**Offerings above the level of approved programs must be approved in advance by the Provost.**

Signature of Provost (if above level of approved programs)	Date
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**ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE**

Signature, Chair	Date
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Faculty Senate Review Committee:  Curriculum Review  GAAC  
 Core Review  SADAC

**ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)**

Signature, Chair, Program/Department of:	Date
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Signature, Chair, College/School Curriculum Council for:	Date
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**ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE**

	Date	
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Signature, Chair

Faculty Senate Review Committee: \_\_\_Curriculum Review \_\_\_GAAC

\_\_\_Core Review \_\_\_SADAC

**ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)**

	Date	
--	------	--

Signature, Chair,  
Program/Department of:

	Date	
--	------	--

Signature, Chair, College/School  
Curriculum Council for:

	Date	
--	------	--

Signature, Dean, College/School  
of:

**ATTACH COMPLETE SYLLABUS (as part of this application).** This list is online at:  
<http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/uaf-syllabus-requirements/>  
The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied.

**SYLLABUS CHECKLIST FOR ALL UAF COURSES**

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

**1. Course information:**

Title,  number,  credits,  prerequisites,  location,  meeting time (make sure that contact hours are in line with credits).

**2. Instructor (and if applicable, Teaching Assistant) information:**

Name,  office location,  office hours,  telephone,  email address.

**3. Course readings/materials:**

- Course textbook title,  author,  edition/publisher.
- Supplementary readings (indicate whether  required or  recommended) and
- any supplies required.

**4. Course description:**

- Content of the course and how it fits into the broader curriculum;
- Expected proficiencies required to undertake the course, if applicable.
- Inclusion of catalog description is *strongly* recommended, and
- Description in syllabus must be consistent with catalog course description.

**5.  Course Goals (general), and (see #6)**

**6.  Student Learning Outcomes (more specific)**

**7. Instructional methods:**

Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

**8. Course calendar:**

A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

**9. Course policies:**

Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

**10. Evaluation:**

Specify how students will be evaluated,  what factors will be included,  their relative value, and  how they will be tabulated into grades (on a curve, absolute scores, etc.)  Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but is a convenient way to publicize this.) Link to PDF summary of grading policy for "C":  
[http://www.uaf.edu/files/uafgov/Info-to-Publicize-C\\_Grading-Policy-UPDATED-May-2013.pdf](http://www.uaf.edu/files/uafgov/Info-to-Publicize-C_Grading-Policy-UPDATED-May-2013.pdf)

**11. Support Services:**

Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

**12. Disabilities Services:** Note that the phone# and location have been **updated**.

<http://www.uaf.edu/disability/faculty/> The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials.

State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

# Course Syllabus

**Course Title: Biology of Addiction**

**Course Number: BIOL 194**

**Number of Credits: 3**

**Meeting Time: Asynchronous student learning on blackboard (see Calendar)**

**Semester: Fall 2017**

**Prerequisites: Placement in ENGL F111X or higher; placement in DEVM F105 or higher; or permission of instructor (3+0).**

## **Instructor Information:**

Instructor Name: Dr. Anshul Pandya

E-mail: [aapandya@alaska.edu](mailto:aapandya@alaska.edu)

Phone: (907) 474-2748

Office Hours: 11 AM to 4 PM Monday to Thursday.

Please use the email address provided, it is the best way to contact the instructor. All emails will be responded within 48 hours.

## **Course Textbook and Materials:**

### **Required Textbook**

**Title:** Drug Use and Abuse. 6<sup>th</sup> Edition.

**Author:** Stephen A. Maisto, Mark Galizio and Gerard J. Connors

**ISBN-10:** 0495814415

**Other Class Resources:** Other class resources such published research articles relevant to the topics discussed in this course will be provided by the instructor.

**Materials or supplies required:** Students will need to have regular access to a computer and the internet. The students are required to check the blackboard site for the course regularly.

## **Course Description:**

This course covers various chemical substances of abuse and neurobiological mechanism of addiction. Functioning of the nervous system, actions of addictive drugs, ways of avoidance and treatment of addiction will be discussed. Information course only, should not be used for treatment or counseling in any form. May not be used as biology elective credit for a major in biological sciences. Note: Suitable for non-science majors and those seeking preliminary instruction before beginning study in health-related areas.

## **Course Goals:**

- 1) Provide an overview of neuro-physiological process of addiction and related behaviors.
- 2) Explain the pharmacological action of alcohol and common substances of abuse.
- 3) Provide strategies for avoidance and treatment of addiction.



**Learning Outcomes:**

After successful completion of this course the student will be able to:

- 1) Describe the common substances of abuse and what is harmful drug use
- 2) Identify the structure of the brain and different brain regions
- 3) Explain the structure of a single nerve cell and its function
- 4) Explain the basics of pharmacology
- 5) Recognize the pharmacology of common substances of abuse and addiction
- 6) Recognize the symptoms of addiction and know how tolerance develops
- 7) Identify the ways of avoiding substances abuse and treatment for common substances of addiction

**Instructional Methods:**

Course offered asynchronously through UAF eLearning & Distance Education every Fall semester. Lectures which will cover the course material will be in form of video that will be available on Blackboard. **Blackboard Web Site:** <http://classes.uaf.edu/>

All course information, supporting documents, and exam scores for this course will be maintained on the UAF Blackboard website. It is therefore important that you check the site regularly for updates. Moreover, time-sensitive information and reminders will occasionally be sent, so it is important to verify that your email address is correct and current.

**Course Policies:**

Students are expected to complete all lessons on a timely basis. Students are expected to participate in all online discussions, exercises, tests and quizzes.

**Late assignments:** Students are expected to complete all the assignments and exams by the deadlines provided. I will not accept late submissions. If you have extenuating circumstances, please contact the instructor by the deadline for extension. Remember extensions will be granted only in very serious situations or circumstances. Any extension not discussed with the instructor will not be accepted. The instructor reserves the right to deny extensions resulting in an incomplete grade.

**Important Dates:** Check the UAF Academic Calendar for important dates related to fee payment, class registration and last day to drop courses. The calendar can be viewed online at: [http://www.uaf.edu/catalog/current/acad\\_calendar.html](http://www.uaf.edu/catalog/current/acad_calendar.html)

**Amending this Syllabus:** The instructor may change this syllabus and any changes will be clearly communicated to the students immediately via email and posted on Blackboard. The instructor reserves to make changes to the grading policy that are of benefit to ALL students enrolled in the course. None of the changes to the syllabus subject to student vote or approval.

**Privacy:** The student's privacy with regards to performance will be respected at all times in the class. Please do not discuss your grades or ask others about theirs within the classroom context.

**Plagiarism/Academic Integrity:** Plagiarism and cheating are serious offenses and may result in failure on exams, papers, projects, or courses. The entire purpose of this class is to acquire useful skills. To cheat is to lose the opportunity to acquire skills. Please cite all your sources to avoid plagiarism. Contents in the assignment from unreferenced source will be caught and given an F-grade instantly.

**Support Services:**

Support can be obtained through the University of Alaska Library system, online resources, and the instructor. Additional services are available through Student Support Services (<http://www.uaf.edu/sssp/>) at UAF.

**Disabilities Services:**

UAF has a Disability Services office that operates in conjunction with the College of Rural Alaska's (CRA) campuses and UAF's Center for Distance Education (CDE). Disability Services, a part of UAF's Center for Health and Counseling, provides academic accommodations to enrolled students who are identified as being eligible for these services. If you believe you are eligible, please visit <http://www.uaf.edu/chc/disability.html> on the web or contact a student affairs staff person at your nearest local campus. You can also contact Disability Services on the Fairbanks Campus at (907) 474-7043, [fydso@uaf.edu](mailto:fydso@uaf.edu).

**Method of Evaluation & Grading**

Grading will be based as follows:

A = 90+%, B = 80+%, C = 70+%, D = 60+%, F < 60%.

Evaluations will be based on following:

Class participation – 160 points (16 %)

Students will be expected to take part in online discussion on a topic given by the instructor. 8 topics of discussion will be introduced. Each topic will be open for discussion for a period of 10 days. Each topic will be worth 20 points. Students will be assessed on the following: writing pertinent to the subject, quality of student's contribution (points made and arguments presented), and evidence of external reading on the topic.

Weekly homework – 140 points (14 %)

Students will be given 7 homework assignments. The topics and rubric for the written homework assignment will be provided. Each homework assignment will be worth 20 points.

Student presentation – 200 Points (20%)

Students will prepare a PowerPoint presentation with audio or a video on a topic chosen by the student and approved by the instructor.

Major written assignment (1000 words) – 200 Points (20 %)

The topic and rubric for the written assignment will be provided on blackboard.

Mid-term test (take home) – 150 Points (15 %)

Final exam (take home) – 150 Points (15 %) Cumulative

Total – 1000 points (100 % of course grade)

**Class Calendar:**

Week No	Textbook Chapters	Topic Covered	Assignments Due Dates & Test Dates
1	1, 2	Introduction to drugs and drug related jurisprudence	
2	3	Nervous system structure & function	Weekly homework – 1
3	3	Action potential & chemical neurotransmission	Weekly homework – 2
4	4	Introduction to Pharmacology	Weekly homework – 3
5	5	New drug development & Psychopharmacology	
6	9	Alcohol abuse	Weekly homework – 4
7	7	Nicotine addiction	
8	6	Addictive properties of cocaine and amphetamines	Mid-term test
9	8	Can coffee be addictive?	
10	10	Use and abuse of opiates	Weekly homework – 5
11	11	Marijuana use and abuse	Weekly homework – 6
12	12	Addictive properties Hallucinogens	Weekly homework – 7
13	14	Non-prescription and Prescription drug abuse	Major written assignment due
14	15, 16	Addiction treatment and prevention	Student presentation due
15		Final Exam Review / Final exams	Final exam